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ABSTRACT

In order to assess the job market in the Moraine Park Vocational, Technical and Adult Education (VTAE) District, a questionnaire was developed and sent to 3,811 companies, businesses, and institutions in the District. The 1,180 survey responses represented a 31 percent response rate. However, a majority of the large businesses in the District responded, so in all over 50 percent of area employees were included in the study. A total of 544 different occupations were classified according to the Dictionary of Occupational Titles classification system. This document lists the qualifications for employment, average wage, and the anticipated number of job openings for the next five years for each of these occupations. In addition, a listing of various programs and courses which area employers would like Moraine Park Technical Institute to offer, and an evaluation of occupations which employers find difficult to fill are presented. Based on this information, which is extensively tabulated in this document, these recommendations are made: (1) Moraine Park should initiate or expand course offerings in the following areas: telephone repair, sewing machine operation, mechanics, food service, finance, insurance, and real estate; (2) a coordinating unit for manpower information should be established; and (3) more emphasis should be placed on personal devolopment in all Moraine Park courses. (NHM)

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Final Report

Project No. 10-068-151-225

COMPREHENSIVE MANPOWER STUDY

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MORAINE PARK VTAE DISTRICT

Fond du Lac, Wisconsin

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July, 1975

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Art Marson

ABSTRACT

A study of the job market in the Moraine Park VTAE District has been conducted. This study included the development and the updating of a mailing list containing the addresses of all companies, businesses, and institutions in the District. A trial questionnaire was developed and sent to a sampling of 50 employers taken from the list in order to determine its effectiveness in gathering manpower information. Having received a favorable response to this trial questionnaire, the final Manpower questionnaire was developed and sent to 3,811 companies, businesses and institutions in the Moraine Park VTAE District.

The response to the Manpower questionnaire was slightly less than expected, having received a return from 1,180 or approximately 31% of the businesses. However, a majority of the large businesses in the District responded to the questionnaire, and therefore over 50% of the employees in the District were included in the study.

A special blue section is included in this report, along with the results of the study. This blue section will serve as a quick reference section. It contains a listing of all the 544 occupations identified on Manpower questionnaire returns.

The information received during the course of the Study has been summarized, with enough information received to allow for the development of specific recommendations. These recommendations made are based on statistics and feelings expressed by area employers in occupations which employers in the District would like the Moraine Park Technical Institute to offer training.

INTRODUCTION

As one may readily observe, today's society has become very technical, with much labor being performed by sophisticated instruments and machines. From this technical aspect of society evolves a critical need for properly trained personnel. Unless there are persons properly prepared to perform on the job, individual employers, as well as society in general, will be faced with a loss in production. Therefore, workers need to be prepared to meet the present and future need for trained personnel. A basic means in the development of a work-force is through proper training, both in school and on the job.

With this goal in mind, the Moraine Park Technical Institute conducted a Comprehensive Manpower Study. Working in cooperation with Moraine Park on this survey were the Wisconsin Job Service (formerly the Wisconsin State Employment Service), and the Cooperative Education Service Agency 13.

PURPOSE

The purpose of the Comprehensive Manpower Study is to provide the Moraine Park District with accurate information on which decisions could be based in the long-range planning of course and program offerings.

There has been an acute lack of essential data available upon which valid long-range planning can be based. At best, data that was over two years old served only as a poor guideline for long-range planning in preparation for program expansion and the implementation of new programs. Up-to-date and accurate data will provide Moraine Park District with a sound basis for decision making. It will eliminate the guesswork in the continuing effort to provide needed services to the student, as well as to business and industry.

Three basic objectives were included in the Comprehensive Manpower Study. The first objective was to develop an updated and complete mailing list containing all companies, businesses, and institutions in Moraine Park District. This mailing list would serve to define the population of the Study.

A second objective of the study was to determine areas where there would be projected employment needs. All areas of present or projected employment were identified and evaluated in the study.

The third major objective was to survey business and industry to identify the aspects of the present job market, especially in relation to the various occupational areas in which the Moraine Park Technical Institute offers training.

Purpose (continued)

Other objectives included: 1) a determination of the average wage rate for various occupations, 2) a listing of various programs and courses which area employers would like Moraine Park to offer, 3) an evaluation of occupations which employers find difficult to fill, and 4) the development of a system of keeping employment data updated annually. As the Study progressed, however, it became apparent that this final objective would be difficult to achieve. Employment figures were very difficult to obtain, and employers throughout the District were beginning to feel as if they were being "surveyed to death".

PARTICIPATION IN STUDY

The Comprehensive Manpower Study was conducted for the benefit of Moraine Park and employers of companies, businesses and institutions located in the Moraine Park VTAE District. The Moraine Park VTAE District encompasses over 2,600 square miles and, as can be seen in Figure 1, is comprised of Fond du Lac and Green Lake Counties; the major portion of Dodge and Washington Counties; parts of Columbia, Marquette, Waushara, and Winnebago Counties; and the New Holstein School District, parts of which are in Calumet and Sheboygan Counties.

There are approximately 240,000 persons residing in the Moraine Park VTAE District. Of this number, approximately 98,000 are employed. Nearly 91% (of the employed)work in one of the 4,646 companies, businesses, and institutions located in the District, while the remaining 9% are self-employed farm owners and managers or farm laborers. The 9% of the employees in farm-related occupations were not included as part of the population in the Manpower Study.

An overview of the labor force for all employed persons 16 years old and over is presented in Table I. There were 90,773 employees, age 16 and over, in the Moraine Park District according to the 1970 census. The majority of these employees, approximately one-third, are employed in the Manufacturing Industry. A large number of employees work in Service Industries and in Retail Trade.

1970 EMPLOYMENT BY COUNTY

TABLE I

County / Type of Business	Fond du Lac	Dodge	Washington	Green Lake	Total
Agriculture	2,830	3,493	1,648	952	8,923
Mining	59	14	48	16	137
Construction	1,593	1,130	1,501	474	4,698
Manufacturing	10,712	9,639	10,481	1,932	32,764
Transportation	1,332	613	537	122	2,609
Public Utilities	704	429	590	135	1,858
Wholesale Trade	881	666	663	98	2,308
Retail Trade	5,314	3,617	3,664	1,113	13,708
Finance	819	585	745	151	2,300
Services	7,746	4,887	4,743	1,318	18,694
Public Administration	1,013	1,044	506	211	2,774
TOTAL	33,003	26,122	25,126	6,522	90,773

Participation (Continued)

Of the four major counties in the District, Fond du Lac County has the largest labor force, with 33,003 employees, closely followed by Dodge County with 26,122 employees and Washington County with 25,126. Green Lake County has the smallest labor force, with only 6,522 employees.

The population in the Moraine Park District has been increasing during the previous 25 years. This can readily be seen in Table II, which shows the population in the District for the years 1950, 1960, and a projection figure for 1975 and 1980. The population statistics were broken down by County to show that the total population increase--over 66,000 since 1950--was due to a steady increase in the population of each of the four principal Counties in the District.

TABLE II

MPTI POPULATION - 1950 TO 1980

Year / County	1950	1960	1970	1975	1980[1]
Fond du Lac	67,829	75,085	84,567	86,206	95,800
Dodge	57,611	63,170	69,004	68,863	74,300
Green Lake	14,092	15,418	16,878	17,098	18,200
Washington	33,902	46,119	63,839	68,652	83,800
TOTAL	173,434	199,792	234,288	240,815	272,100

The exception is Dodge County, which had a slight decrease in population between 1970 and 1975, but which is expected to increase again by 1980. The population growth of the entire District is expected to continue, with an estimated 1980 population of 272,100. This represents a 16% increase over the 1970 population. The largest increase in population will occur in Washington County.

1 Estimated - Wisconsin Population Projections, March, 1972, 2nd edition, Document No. BSP-IS-72-3, Prepared by State of Wisconsin Department of Administration, Bureau of Planning and Budget Information Systems Unit, Pages 119, 125, 129, and 172.

Through a comparison of population and labor statistics, Table III was developed. This table shows that there is an overall participation rate of approximately 41% in the Moraine Park VTAE District.

TABLE III

COMPARISON OF POPULATION WITH LABOR FORCE

	1970	1975
Population	234,288	239,815
Labor Force (16 yrs. & over)	90,773	97,671
Participation Rate	39%	41%

There are 4,646 places of business in the Moraine Park District. As shown in Table IV, the majority of these businesses are in the category of Retail Trade. The category includes all types of retail stores, gas stations, garages, bars, restaurants, and motels. The second largest category is the Service category, which includes such businesses as beauty and barber shops, laundromats, recreational facilities, lawyers, medical facilities, and educational institutions.

TABLE IV

NUMBER OF BUSINESSES BY CATEGORY

Type of Business	Number in MPTI District
Agriculture, Forestry, & Fisheries	53[2]
Mining	19
Construction	416
Manufacturing	520
Transportation	181
Communications, Utilities	32
Wholesale Trade	150
Retail Trade	1,926
Finance, Insurance, Real Estate	438
Services	797
Government	58
Miscellaneous	56

[2] Does not include private farm operations

However, the picture presented in Table IV changes slightly when the 4,646 businesses are presented according to their size as well as their type of business. This information is presented in Table V and shows the Manufacturing category, although third in the number of businesses is first in number of employees, since it contains a majority of the larger companies in the District.

TABLE V

SIZE OF COMPANY BY SIC CLASSIFICATION

	01-14	15-17	20-39	40-49	50-59	60-67	70-89	90-94	TOTAL
	Agriculture Mining	Construc-tion	Manufac-turing	Transpor-tation	Wholesale Retail Trade	Finance	Services	Government	-----
1,000 +			8						8
500-1,000			7	1			2	1	11
250-499			7	1	1		7	1	17
100-249			35	4	5	5	21		70
50-99		2	49	10	18	2	19	4	104
25-49	2	7	74	13	69	12	31	4	212
9-24	8	27	97	40	243	31	50	10	506
5-8	9	66	89	23	374	53	123	9	746
1-4	25	195	72	60	566	111	357	12	1,398
0-Unknown	28	119	82	61	800	224	243	17	1,574
TOTAL	72	416	520	213	2,076	438	853	58	4,546

The entire Moraine Park VTAE District, as previously described in this report, served as the population for the Manpower Study. Table VI summarizes this information. This table shows there are approximately 92,014 employees in the District, of which 8,895 are farm-related employees, which are excluded from the original population of the study. This left a total of 83,119 employees, working in the 4,646 companies, businesses, and institutions in the District, as the population for the Study.

TABLE VI

POPULATION - MANPOWER STUDY

Total Number of Businesses		4,646
EMPLOYEES[3]	Total - 16 years & over	90,773
	FARM Owners and Laborers Total - 16 years & over	8,491
	Total - 14 years & 15 years	1,241
	FARM Laborers Total - 14 years & 15 years	404
Total Employees		92,014
Total Farm Employees[4]		8,895
Total Employees in Population for Manpower Study		83,119

From this population, a sample of 3,811 businesses (employing a vast majority of the 83,000 employees), was selected to participate in the Manpower Study.

Questionnaires were mailed to each of the 3,811 businesses selected to participate. Of this number, 1,180 questionnaires were returned, which represents a return of 31%.

Table VII (on the following page), summarizes the participation in the Study.

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[3]1970 Census Information

[4]Excluded from the Population for the Manpower Study

TABLE VII
PARTICIPATION IN MANPOWER STUDY

Type of Business	No. of Businesses in MPTI District	No. of Questionnaires Sent Out	No. of Questionnaires Returned	Percent of Questionnaires Returned
AGRIC., FORESTRY, FISHERIES	53	45	12	26.7
MINING	19	19	6	31.6
CONSTRUCTION	416	393	112	28.5
MANUFACTURING	520	491	181	36.9
Feed Mills, Farm Supplies	70	65	20	30.8
Dairies, Canneries, etc.	88	80	31	38.8
Textiles, Fur, Canvas	16	16	8	50.0
Woodworking	18	18	8	44.4
Newspapers, Printing	52	45	14	31.1
Plastics	8	7	3	42.9
Leather, Shoes	15	15	6	40.0
Concrete Products	28	29	7	24.1
Heating, Foundry	89	84	38	45.2
Machine Shops, Tooling	111	107	36	33.6
Transportation Equip.	10	10	2	20.0
Scientific Instrument	4	4	2	50.0
Photo, Optical, Watch	3	3	0	—
Advertisers; etc.	8	8	6	75.0
TRANSPORTATION	181	174	54	31.6
Motor Freight, Cabs	176	171	52	30.4
Travel Agents	5	3	2	66.7
COMMUNICATIONS, UTILITIES	32	31	13	41.9
Telephone, Radio	25	24	7	29.2
Power and Gas	7	7	6	85.7
WHOLESALE TRADE	150	145	37	25.5
RETAIL TRADE	1,926	1,520	371	24.4
Lumber Companies	45	36	12	33.3
Hardware, Farm Implement	141	116	31	26.7
Department Stores, etc.	334	254	61	24.0
Food Stores	185	151	43	28.5
Gas Stations, Garages	430	376	91	24.2
Furniture	73	56	17	30.4
Music, Radio, TV	73	58	17	29.3
Bars, Restaurants, Motel	608	444	86	19.4
Pharmacies	37	29	13	44.8
FINANCE, INSURANCE, REAL ESTATE	438	238	113	47.5
Banks, Finance	103	96	50	52.1
Insurance	196	77	36	46.8
Real Estate	128	56	23	41.1
Misc. Investments	11	9	4	44.4
SERVICES	797	643	228	35.5
Laundromats	46	32	11	34.4
Photographers	23	7	2	28.6
Funeral Homes	30	15	5	33.3
Barber, Beauty Shops	187	126	42	33.3
Hearing Aids	2	2	1	50.0
Cleaning Services	7	7	2	28.6
Repair Shops	24	21	9	42.9
Recreation	78	68	18	26.5
Medical and Health	253	239	75	31.4
Lawyers, CPA, etc.	107	91	39	42.9
Education	40	35	24	68.6
GOVERNMENT	58	56	38	67.9
MISCELLANEOUS	56	56	15	26.8
—TOTALS—	4,846	3,811	1,180	31.0%

From this table we see that the largest number of questionnaires were sent to businesses in the two categories of Retail Trade and Services. The greatest number of returns also came from these two categories. However, as far as the percentage of return is concerned, the category entitled 'Government', which includes city and county government offices, as well as federal government offices and post offices, had the best return. Following 'Government' was the category 'Finance, Insurance, and Real Estate', with a 47.5% return, and 'Communications and Utilities', with a 41.9% return. The category with the lowest percent of returns was the category to which the majority of the questionnaires were mailed - that is - the Retail Trade category.

At first, it would seem that the 31% rate of return for the Manpower Study is very low, and perhaps it does not represent a valid cross-section of the population. However, if the participation in the Manpower Study was determined by the number of employees covered in the Study as opposed to the number of businesses contained in the Study, the percent of return would be much higher. As can be seen in Table VIII, there were approximately 83,000 employees in the population for the Study, and of this total, approximately 42,000 employees were included in the Study. This puts the participation rate slightly over 50%.

TABLE VIII

PARTICIPATION RATE - MANPOWER STUDY

Total Employees in Population for Manpower Study	83,119
Total Employees - Manpower Study Returns	41,754
Percent of Population Employees Contained in Manpower Study	50.2%

The reason for the difference in percentage between the number of businesses included in the Study and the number of employees included in the Study is, of course, due to the large number of small businesses that failed to respond. Many of these non-respondents include taverns, gas stations, doctor and dentist offices, along with retail stores and construction companies that employ only a few people.

Table IX shows the number and percent of return for the larger businesses in the District. For all businesses that employ over 50 people and were part of the sampling for this Study, 57.9% returned the questionnaire. Also, 89.5% of the companies (17 out of 19) employing 500 or more people responded to the Study.

TABLE IX

RETURNS FROM LARGE COMPANIES

NUMBER OF EMPLOYEES	NUMBER OF COMPANIES CONTACTED	NUMBER OF COMPANIES RESPONDING	PERCENT
50-100	101	48	47.5
100-500	77	49	63.6
500-1,000	11	9	81.8
1,000 +	8	8	100.0
TOTAL	197	114	57.9

METHOD

SURVEY METHOD

The method by which the Study was conducted was the survey, with the basic survey instrument being the questionnaire. The questionnaire used was developed after a review of other questionnaires which were used to conduct similar studies in Wisconsin. A trial questionnaire was developed and mailed to a sampling of 50 area employers, asking them to review the questionnaire and to comment on how the questionnaire could be simplified and improved (see Appendixes A-1, and C-1, pages 133 and 136). The response from this trial questionnaire was favorable, with all respondents stating they would be willing and able to complete the questionnaire, and in a few instances there were excellent comments on how to simplify and improve the questionnaire.

A number of these suggestions were incorporated into the final questionnaire that was used in conducting this Study. The final questionnaire (see Appendixes A-2 and C-2, pages 134 and 137) was developed to provide enough flexibility to include 48 different types of companies or businesses. These 48 categories of businesses parallel those listed in Table VII, page 10, therefore, will not be listed again.

The flexibility in the final questionnaire was obtained by developing a separate list of employees to be included in the left-hand column (Column A) of the final questionnaire. For example, the questionnaires sent to Construction Companies contained such occupations in Column A as carpenter, painter, bricklayer, roofer, etc. while those questionnaires sent to Retail Stores contained occupations such as salesman, cashier, department manager, etc., and those sent to Medical Facilities contained occupations such as nurse, doctor, X-ray technician, medical records clerk, and so forth. By listing these occupations in Column A, the questionnaire became more simple for employers in each type of business, and also served as an example of the type of occupations which employers could list, in addition to those already listed, in Column A, especially on the reverse side of the questionnaire.

The final questionnaire was mailed to a total of 3,811 companies, businesses, or institutions in the Moraine Park VTAE District during four separate mailings between October and December 1974, and a total of 1,180 questionnaires were returned. These returned questionnaires were reviewed and the occupations listed on them were coded according to their Dictionary of Occupational Titles Classification. This code number is a six-digit number developed by the U. S. Employment Service, a division of the Department of Industry, Labor, and Human Relations, and it serves to identify over 35,000 different occupational titles. Much of the work involved in classifying occupational titles (listed on the Manpower questionnaire returns) was performed by the Fond du Lac Job Service Office.

Every attempt was made to obtain complete responses from as many area employers as possible. In hopes of obtaining a larger percent of response from companies with 50 or more employees, a second questionnaire was mailed to those employers who failed to respond to the first questionnaire.

The information obtained from the returns was keypunched, totaled, and has been made available on computer printout. This information was analyzed, and the results are presented in this final report. The blue section of this report contains the information that was made available by the computer printout. It contains its own index, and has been separated from the rest of the report to facilitate access to this information by the reader.

RESULTS

A FEW WORDS OF CAUTION

The presentation of information in the Manpower Report has created some areas of concern. Therefore, the following points should be remembered when using the information presented in this report:

1. When the Manpower questionnaire was sent to area employers, they were asked to identify the occupation of their employees. As a result, a variety of events may have occurred: Many people have a tendency to upgrade their skill level, and therefore, there may be too many "secretaries" and too few "typists". Also, there is the tendency to group occupations under broad categories, and therefore, there a vast number of "cannery workers", "machine operators", and "general laborers". In all cases, the reader is cautioned not to assume that certain occupations contain well defined skill levels.

2. In regard to the number of job openings expected from 1975 to 1980, the reader is cautioned not to make assumptions about the supply and demand for many non-entry level occupations such as managers and supervisors. These types of positions are usually filled by promotion from a lower level job, and therefore, are in balance in relation to supply and demand.

   Similarly, supply and demand statements should be avoided for certain low skill occupations, as in times of recession, these positions may be filled by skilled workers who cannot find work anywhere else. For example, an electrical engineer is a potential taxi driver, or a nurse is a potential waitress.

3. Women in the labor force have an entirely different role than do men. Many women often drop out of the labor market to raise a family, only to return to employment at a later time. Therefore, the number of newly trained personnel to replace workers in many traditionally female-oriented occupations, such as teachers and nurses, may be lower than actually indicated.

4. One of the most important phenomenon to be remembered in reviewing the manpower information in this report is that a high school diploma is becoming the basic requirement for entrance into many semi-skilled positions. Education beyond high school may be <u>desired</u> but not <u>required</u> for a particular job. For example, vocational-technical schools offer training for secretarial and clerical occupations, yet a high school diploma is sufficient for entrance into these types of occupations.

5. Another phenomenon which is becoming widespread is that some jobs will continuously have openings available, not because of a lack of properly trained personnel, but because the jobs are undesirable due to poor working conditions, low pay, etc. Included in this category are insurance agents and underwriters, shoe repairers, metal platers, clothing pressers and ironers, sewers and stitchers, taxi drivers, dead animal skinners, table cleaners, dishwashers, cooks, and housekeepers. The supply of people with sufficient training for these positions is unlimited; however, these positions continuously have unfilled job openings.

6. Finally, it should be remembered that the federal and state governments play an important role in determining the demand for certain types of workers. The demand for many scientists---astronomers in particular---has decreased since the slowdown in the U. S. Space Program. Also, the demand for teachers, social workers, etc., increases when the government lends financial support to these types of positions.

All of the aforementioned phenomenon have an important influence on the employment conditions of the future. They should be remembered when one plans to make assumptions based on information contained in this report.

DICTIONARY OF OCCUPATIONAL TITLES CLASSIFICATION

The Dictionary of Occupational Titles (DOT) is the standard source of occupational information in the manpower field and in other related fields. The Dictionary consists of two volumes, with Volume I containing an alphabetical arrangement of job titles along with their definitions, and Volume II containing twelve basic sections which serve to group jobs that have the same basic occupational, industrial, or worker characteristics and to help in classifying the abilities, vocational experience, and potential of workers.[5]

The Dictionary of Occupational Titles defines jobs according to a six-digit code number. This code number is separated into two groups of three digits each, by a decimal point. The first three digits of the code number consist of the Occupational Group Arrangement, and the last three digits consist of the Worker Trait Arrangement.

[5]Dictionary of Occupational Titles, Volume II, page V, 1965 edition. U. S. Department of Labor, Washington, D.C.

In the Occupational Group Arrangement, all jobs are grouped into nine broad categories. These nine broad categories are identified by the numbers 0 through 9, and they form the first didit of the DOT code number. The nine categories are:

0, 1	Professional, Technical, and Managerial Occupations
2	Clerical and Sales Occupations
3	Service Occupations
4	Farming, Fishing, Forestry, and Related Occupations
5	Processing Occupations
6	Machine Trades Occupations
7	Bench Work Occupations
8	Structural Work Occupations
9	Miscellaneous Occupations

These nine categories are further divided into eighty-four two-digit divisions, which, in turn, are separated into 603 three-digit groups. For example, the DOT code number for a key punch operator is 213.582, and it is broken down as follows:

Category: 2 Clerical and Sales Occupations
This category includes occupations concerned with preparing, transcribing, transferring, systematizing, and preserving written communications and records; collecting accounts; distributing information; and influencing customers in favor of a commodity or service. Includes occupations closely identified with sales transactions even though they do not involve actual participation.

Division: 21 Computing and Account-Recording Occupations
This division includes occupations concerned with systematizing information about transactions and activities into accounts and quantitative records, and paying and receiving money.

Three-Digit Group: 213 Automatic Data Processing Equipment Operators

This group includes occupations concerned with electronic and electromechanical machines that record, store, process, and transcribe data from punchcards, paper tape, magnetic tape, or other sources; solve mathematical, engineering or technical problems; keep records, or supply information. Includes machines that transcribe data to or from punchcards or tape for use in automatic data processing equipment.

Further information about the categories, divisions, or three-digit groups can be found in the Dictionary of Occupational Titles, Volume II, pages 1-213.

The last three digits of the DOT code number are based on U. S. Employment Service research which shows that every job requires a worker to function in relation to Data, People, or Things. This relationship to Data, People, or Things is arranged for each occupation as a part of a hierarchy that moves from the simple to the complex according to the following pattern:

Data (4th digit)	People (5th digit)	Things (6th digit)
0 Synthesizing	0 Mentoring	0 Setting-Up
1 Coordinating	1 Negotiating	1 Precision Working
2 Analyzing	2 Instructing	2 Operating - Controlling
3 Compiling	3 Supervising	3 Driving - Operating
4 Computing	4 Diverting	4 Manipulating
5 Copying	5 Persuading	5 Tending
6 Comparing	6 Speaking - Signaling	6 Feeding - Offbearing
7 } No Significant	7 Serving	7 Handling
8 } Relationship	8 No Significant Relationship	8 No Significant Relationship

These last three digits of the DOT code number, taken together, serve to express the total complexity at which a job requires a worker to function, and together they form the Worker Trait Arrangements.[6]

[6]DOT - Volume I, pages XVI, XVII, XVIII, and XIX

Returning to our example of a key punch operator, the Worker Trait Arrangement is .582 which shows that a kew punch operator's relationship to Data is Copying, to People is No Significant Relationship, and to Things is Operating - Controlling. Further information concerning the Worker Trait Arrangements can be obtained from the Dictionary of Occupational Titles, Volume II.

According to the DOT classifications, 544 different jobs were identified in the Comprehensive Manpower Study. A summary of these jobs is presented in Table X. This table shows that 41,754 persons were employed at a position described by one of the 544 different job titles; and that during the next five years (1975-1979), over 21,000 job openings will occur.

Table XI (page 21) shows the same information given in Table X (page 20); however, it is presented in its percentage equivalency. For example, of the 41,754 persons that were employed (according to the Manpower Study returns), 83% of these persons were employed full-time, 13% were employed part-time, and 4% of the 41,754 persons were temporary employees.

TABLE X

SUMMARY TABLE — DOT CODE

DOT CODE	TITLE	EMPLOYEES			JOBS OPEN		ANTICIPATED JOB OPENINGS					EDUCATION[7]							TRAINING[7]				EXPERIENCE		PROMOTION	
		Full Time	Part Time	Temporary	Now	One Month	1975	1976	1977	1978	1979	1	2	3	4	5	6	7	1	2	3	4	Yes	No	Yes	No
000 - 199	Professional, Technical, & Managerial	6472	903	95	138	97	419	413	409	388	392	20	377	111	163	156	482	70	694	101	0	166	857	510	710	542
200 - 249	Clerical	4231	910	51	55	29	442	443	466	430	426	45	858	145	102	40	28	144	745	87	12	75	486	831	708	513
250 - 299	Sales	1326	716	40	41	24	266	239	226	216	215	25	212	22	27	20	6	54	242	27	1	8	130	233	211	134
300 - 399	Services	2149	1,821	147	91	43	474	387	302	306	308	184	269	54	20	5	6	124	306	103	13	25	247	478	276	360
400 - 499	Farming, Forestry, and Fisheries	49	24	27	2	2	31	29	26	26	36	14	13	2	1	0	2	3	11	6	0	0	12	23	13	16
500 - 599	Processing	1989	78	1218	22	12	501	482	468	480	468	44	68	4	6	1	1	32	100	10	1	1	39	120	101	56
600 - 699	Machine Trade	7104	77	10	54	19	528	661	788	864	690	40	149	40	51	0	1	84	167	72	1	25	169	186	228	91
700 - 799	Bench Work	2978	83	3	52	14	362	397	399	363	381	26	64	18	15	2	0	31	78	25	0	12	44	109	93	45
800 - 899	Structural Work	2732	154	36	48	24	273	174	165	163	176	59	245	34	28	3	1	81	225	137	2	9	228	214	236	169
900 - 999	Miscellaneous	5536	683	112	28	13	989	1033	1194	1186	1145	118	189	9	10	2	1	95	178	17	9	22	98	318	199	193
Sub Total		34,566	5,449	1,739	531	277	4,285	4,258	4,443	4,422	4,237	575	2,444	439	423	229	530	718	2,746	585	39	343	2,310	3,022	2,775	2,119
TOTAL		41,754			808		21,645					5,358							3,713				5,332		4,894	

[7]Education

1) Less than high school
2) High school graduate
3) 1-yr. post high school voc. educ.
4) 2-yr. post high school voc. educ.
5) Some college
6) College graduate
7) No preference

Training

1) Formal on-the-job training
2) Apprentice training
3) No special training required
4) Other

TABLE XI
PERCENT SUMMARY TABLE — DOT CODE

DOT CODE	TITLE	EMPLOYEES			JOBS OPEN		ANTICIPATED JOB OPENINGS					EDUCATION [7]							TRAINING [7]				EXPER-IENCE		PROMO-TION	
		Full Time	Part Time	Temp-orary	Now	One Month	1975	1976	1977	1978	1979	1	2	3	4	5	6	7	1	2	3	4	Yes	No	Yes	No
000 - 199	Professional, Tech., & Managerial	87	12	1	59	41	21	20	20	19	19	1	27	8	12	11	35	5	72	11	0	17	63	37	57	43
200 - 249	Clerical	81	18	1	65	35	20	20	21	20	19	3	63	11	7	3	2	11	81	9	1	8	37	63	58	42
250 - 299	Sales	64	34	2	63	37	23	21	19	19	18	7	58	6	7	5	2	15	87	10	0	3	36	64	61	39
300 - 399	Services	52	44	4	68	32	27	22	17	17	17	28	41	8	3	1	1	19	68	23	3	6	34	66	43	57
400 - 499	Farming, Fishing, & Forestry	49	24	27	50	50	21	20	18	18	24	40	37	6	3	0	6	9	65	35	0	0	34	66	45	55
500 - 599	Processing	61	2	37	65	35	21	20	20	20	20	28	44	3	4	1	1	21	89	9	1	1	25	75	64	36
600 - 699	Machine Trades	99	1	0	74	26	15	19	22	24	20	11	41	11	14	0	0	23	63	27	0	9	48	52	71	29
700 - 799	Bench Work	97	3	0	79	21	19	21	21	19	20	17	41	12	10	1	0	20	68	22	0	10	29	71	67	33
800 - 899	Structural Work	93	5	2	67	33	29	18	17	17	19	13	54	8	6	1	0	18	60	36.5	.5	2	52	48	58	42
900 - 999	Miscellaneous	87	11	2	68	32	18	19	22	21	21	28	45	2	2	0	0	22	79	8	4	10	24	76	51	49
	Sub Total	83	13	4	66	34	20	20	21	20	20	11	46	8	8	4	10	13	74	16	1	9	43	57	57	43
	TOTAL	100			100		100					100							100				100		100	

SUMMARY OF DOT CATEGORIES

Professional, Technical and Managerial Occupations

This category contains 6,472 full-time, 903 part-time, and 95 temporary employees, representing 17.9% of the 41,754 total employees included in the Manpower Study. In this category, 2,021 new job openings are expected during the next five years. In addition, 138 jobs were available at the time of the Study, with 97 of these jobs being open for one month or longer. The occupations in which a majority of the job openings were expected to occur include: registered nurse, practical nurse, teacher, management trainee, and social worker. The majority of the jobs that were open for one month or longer include doctors, psychiatrists, and registered nurses.

Most employees in this category are required to have at least a high school education, and 35% are required to have a college degree. Formal on-the-job training is sufficient in most cases. As expected, the educational and training requirements were higher for this category than for any of the remaining nine categories.

For a majority of jobs in this category, experience is required. Out of the ten categories, the Professional, Technical, and Managerial category is the only one placing such high stress on experience.

The possibility for promotion is very good for Professional, Technical and Managerial employees. Nearly 57 percent of the persons employed in this category are eligible for promotion.

Clerical Occupations

The Clerical occupations category contains 5,192 or 12.4 percent of all the employees included in the Study. Of these 5,192 employees, there were 2,207 expected job openings over the next five years. The majority of these openings were expected in the following occupations: secretary, clerk typist, bookkeeper, bank teller, key punch operator, general office clerk, ward clerk, and receptionist. These eight occupations will account for 79% of the expected job openings over the next five years.

At the time of the Manpower Study, there were 55 clerical positions open. Of this number, 29 were open for one month or longer, and therefore, were classified as hard-to-fill. Twenty-three out of these twenty-nine hard-to-fill job openings were for the position of secretary or receptionist.

Over 75% of the companies employing persons in this category required a high school diploma or less. The Clerical occupations for which post high school education was desired were secretaries, bookkeepers, bank cashiers, supervisor-computer operations, computer operators, and payroll clerks.

Formal on-the-job training is satisfactory for 81% of the Clerical occupations. A vast majority of these occupations require no experience, while 58% of the Clerical occupations offer an opportunity for advancement.

Sales Occupations

A total of 2,082 persons were employed in the Sales occupations. This represents 5% of the total employees covered by the survey returns.

There were 1,162 expected job openings during the next five years for Sales occupations. A majority of the openings are for salesmen-advertising, salesmen-drug stores, general salesperson, sales clerk-stores, groceryman, and part-time newspaper carriers. These occupations account for 80% of the Sales occupations job openings.

Forty-one job openings were available for Sales occupations at the time of the Study. Of the forty-one openings, twenty-four were open for one month or longer. These hard-to-fill openings included salesperson-insurance, salesperson-advertising, and part-time newspaper carriers.

Only 77 out of 368 companies required persons in Sales occupations to have more than a high school education. Occupations where post-high school education may be helpful include: customer service worker, salesperson-insurance, salesperson-farm supplies, and for some general salesmen.

In over 87% of the Sales occupations, formal on-the-job training was sufficient. Of the Sales occupations, 64% require no experience, while 61% offered opportunities for promotion.

Service Occupations

Manpower survey returns showed that 4,117 persons were employed in Service occupations. They accounted for nearly 10% of all the employees included in the Study.

At the time of the Manpower Study, 91 job openings were available for Service occupations. Forty-three of these openings were open for one month or longer. They include: janitors, nurse aides, cosmetologists, food service supervisors, dishwashers, cooks, and waitresses. In addition to these openings, 1,777 job openings were predicted for Service occupation workers during the years 1975 through 1979. The majority of the openings will be for waitresses, bartenders, cooks, dishwashers, kitchen helpers, food service supervisors, cosmetologists, campground caretakers, nurse aides or orderlys, shoemakers, and janitors or custodians.

Over 300 respondents to the survey indicated less than a high school education was required for Service occupations. Less than 13% require more than a high school education. Due to low education and training requirements, these occupations serve as entry-level occupations for many people during high school and immediately following their high school graduation.

Occupations for which post-high school education may be necessary include chef, butcher, food service supervisor, cosmetologist, and nurse aide.

Experience was required in some cases, but at least 66% of the respondents indicated no experience was required. Promotions were available in nearly 57% of the cases.

Farming, Fishing, and Forestry Occupations

Only 100 persons were employed in this category according to respondents to the Manpower Study. This number of employees is considerably small in comparison to the actual number of employees working in this category, as farmers and other farm-related businesses were not included in the Manpower Study.

Despite the low number of employees included in the Farming, Fishing, and Forestry occupations, 148 job openings were predicted during the next five years. Seventy-six percent of these openings were for part-time farm equipment operators.

Processing Occupations

According to the Study returns, 3,285 persons were employed in Processing occupations. Of this amount, 1,218 were temporary employees, with over 99% of these employees working as seasonal laborers for canning companies. The majority of the full-time Processing occupation employees were foundry occupations such as production plater, metal pourer, molder, shell core operator, core assembler, and general foundry worker. These same occupations accounted for 32% of the expected job openings during the next five years. The only additional occupation for which there will be a large number of openings is for general cannery workers. Most of these openings are seasonal and they will account for 59% of the 2,399 job openings expected between 1975 and 1979.

Only 12 companies, or 8%, required more than a high school education for a Processing occupation. Occupations where post-high school education may be helpful are: baker, shift superintendant-food processing, quality control technician-food processing, wastewater treatment operator, and cloth washer operator.

Formal on-the-job training was satisfactory for 90% of the Processing occupations, while in only 25% of the cases experience was required, and only 36% of the positions did offer the possibility of being promoted.

Machine Trade Occupations

There were 7,191 employees in the Machine Trade occupations. They accounted for 17% of all the employees in the Study. Fifty-six percent (4,066) of the employees in this category were machinists, machine tool operators, die makers, or semi-skilled machine operators

At the time of the Study, there were 54 job openings in the Machine Trade category. Most of the job openings were for agricultural mechanics, auto mechanics, general mechanics, machinists, and die makers. Of these 54 job openings, 19 were open for one month or longer. The majority of these hard-to-fill positions were for agricultural mechanics, auto mechanics, and die makers.

During the next five years (1975-1979), 3,531 job openings are anticipated in the Machine Trade occupations. Occupations in which most of these openings are expected to occur are: machinist, die maker, turret lathe operator, mill machine set-up operator, drill press set-up operator, tape control machine operator, semi-skilled machine operators, punch press operators, metal fabricators, auto mechanics, diesel mechanics, appliance servicemen, automatic cut-off machine operator, and cutout stitcher-leather products.

Some type of vocational education was required for 25% of the above listed occupations. The remaining 75% require a high school education or less.

Formal on-the-job training was sufficient for a majority (63%) of these positions. However, in 27% of the cases, a formal apprenticeship was required. A large majority of the positions, over 71%, offered the opportunity for promotions.

Bench Work Occupations

According to Manpower Study Results, 3,064 employees were included in the Bench Work occupations category. Over half of these employees were metal finishers, grinders, or some type of an assembler.

At the time of the Study, there were 52 job openings in the Bench Work occupations. The majority of these openings were for four occupations; metal finisher, stitcher or assembler-sports equipment, knitter, and sewing machine operator. Fourteen of these 52 positions were open for one month or longer. Of the 14 that were open for one month or longer, 10 were for a sewing machine operator.

There were 1,902 anticipated job openings for Bench Work occupations during the next five years. Most of these job openings were for general leather workers, sewing machine operators, spray painters, assembler-production, general assembler, metal finishers, chippers, or grinders.

A high school diploma was required for 41% of the Bench Work occupations, and 22% of the positions required some post-high school education.

Only a few companies required previous experience for Bench Work occupations, and a majority offered the opportunity for being promoted.

Structural Work Occupations

According to the Study returns, 2,922 persons were employed in Structural Work occupations. A majority of these 2,922 employees were carpenters, welders, or skilled maintenance men. Over 34% of these employees were classified as a type of welder.

There were 48 positions available for Structural Work occupations at the time the Study was conducted, and exactly half of these were classified as hard-to-fill since they were open for one month or longer. The majority of positions available were for electricians, arc welders, welder-fitters, auto body repairmen, carpenters, plumber-steamfitters, cement masons, and maintenance men. Occupations which had positions open for one month or longer include auto body repairmen, plumber-steamfitters, siders, swimming pool installers, and skilled maintenance men.

During the next five years, 951 job openings were expected in the Structural Work occupations category. This was the category with the fewest expected job openings, and it was second lowest when comparing the number of anticipated job openings with the total number of employees in a category. The Professional, Technical and Managerial category had the fewest job openings in relation to its number of employees.

Occupations for which a number of openings should occur include: arc welder, gas welder, assembler-installer, electrician, bricklayer, sider, roofer, general construction laborer, maintenance man-building, and maintenance man-factory or mill.

A high school education was sufficient for a majority of the Structural Work occupations; however, vocational education was necessary in some cases. Occupations where vocational education may be helpful are: sheet metal journeyman, auto body repairman, electrician, carpenter, plumber, and maintenance man.

Formal on-the-job training was sufficient for 60% of the Structural Work positions. Yet, in over 36% of the cases, a formal apprenticeship was required. Experience was helpful for these positions, but in many cases it was not necessary. There were many opportunities for advancement.

Miscellaneous Occupations

There were 6,331 employees classified in Miscellaneous occupations. The majority of the Miscellaneous occupations were those which are related to the transportation business, such as truck drivers, warehouse workers, material handlers, taxi and bus drivers, and railroad employees.

During the next five years, 5,547 job openings were expected to occur in this category. A vast majority of these openings, over 85%, will be for general laborers. Other occupations which may experience a number of job openings include: truck drivers-heavy, truck drivers-light, brakemen or trainmen, service station attendants, car washers, packagers, baggers, meat wrappers, warehouse men and store laborers.

A majority of the Miscellaneous occuptaions required less than a high school education. This especially holds true for general laborers. In 45% of the responses, a high school education was required. Very few positions require more than a high school education.

Previous experience was desired in only 24% of the positions in this category. A possibility for a promotion to a higher level position existed in approximately 50% of the cases. A large number of the cases where promotion was possible, concern general laborers who may work their way up to other positions.

STANDARD INDUSTRIAL CLASSIFICATION

The Standard Industrial Classification (SIC) is a four-digit industrial code number that was developed by the Technical Committee on Industrial Classification, under the sponsorship and supervision of the Statistical Policy Division of the Office of Management and Budget, Executive Office of the President.

The first two digits of the SIC code number identify the major industrial group to which a company belongs. There are ten basic divisions or industrial groups. Each division has a code range, according to the first two digits, as follows:

01 to 09	-	Agriculture, Forestry, Fishing
10 to 14	-	Mining
15 to 17	-	Construction
20 to 39	-	Manufacturing
40 to 49	-	Transportation, Communication, Electric, Gas, and Sanitary Services
50 to 59	-	Wholesale and Retail Trade
60 to 67	-	Finance, Insurance, and Real Estate
70 to 89	-	Services
90 to 97	-	Government
99	-	Nonclassifiable Establishments

The last two digits in the SIC code help to classify a company more precisely in its major group. For example; the SIC code number of 8063 shows that the company is a member of the service group, as the first two digits are between 70 and 89. The number eighty specifies the type of service; in this case, it is a health service. The third digit, the number 6, shows that the company is a hospital, while the fourth digit, the 3, shows that it is a psychiatric hospital instead of a general medical and surgical hospital (8062), or any other type of specialty hospital, which would have a code number between 8064 and 8069.

Table XII gives a sample of some of the basic SIC codes that were used in the Manpower Study. All questionnaires that were sent out were coded by SIC codes in order to determine the type of company, business, or institution from which questionnaire returns were received. With this information available, Table XIII was developed.

TABLE XII

SAMPLE SIC CODES

Code Number	Description
1520	General Building Contractor
2033	Cannery
2711	Newspapers, Publishing
3541	Machine Tool Manufacturer
4811	Telephone Company
5411	Grocery Store
5511	Car Dealer
5812	Restaurant
5992	Florist
6020	Bank
6411	Insurance Agents and Brokers
7011	Hotels, Motels
7231	Beauty Shops
7933	Bowling Alleys
8011	Doctor's Office
8111	Legal Service
8211	Elementary and Secondary Schools
9190	Post Office

This table is a summary of the Manpower questionnaire returns according to their Standard Industrial Classification. The information is presented in basically the same groups as comprised the ten SIC divisions listed earlier. The major exception being that Nonclassifiable Establishments have been dropped, and they are replaced by Medical Services, which have been separated from the rest of the businesses in the Service division.

TABLE XIII
SUMMARY TABLE — SIC CODE

SIC CODE	GROUP TITLE	EMPLOYEES			JOBS OPEN		ANTICIPATED JOB OPENINGS					EDUCATION[9]							TRAINING[9]				EXPERIENCE REQUIRED		PROMOTION POSSIBLE	
		Full Time	Part Time	Temporary[8]	Now	One Month	1975	1976	1977	1978	1979	1	2	3	4	5	6	7	1	2	3	4	Yes	No	Yes	No
0100-0999	Agriculture	37	14	22	1	2	32	27	25	25	25	4	19	2	2	0	6	1	16	7	0	3	17	16	9	22
1000-1499	Mining	46	2	0	0	0	2	4	1	0	2	6	9	3	0	0	1	2	9	2	0	3	10	11	6	14
1500-1899	Construction	754	93	23	23	6	72	36	32	24	36	30	165	15	18	9	2	49	145	76	2	8	167	139	119	153
2000-3999	Manufacturing	19,924	689	1,328[8]	180	61	2,750	2,959	3,254	3,324	3,097	168	631	114	138	62	91	222	794	101	7	92	540	847	964	338
4000-4999	Transportation Communications Power and Gas	1,703	321	31	16	6	65	41	39	31	27	15	144	16	20	9	4	35	120	35	0	20	121	126	119	108
5000-5999	Wholesale and Retail Trade	2,576	1,571	85	85	53	505	366	343	292	276	164	596	100	128	42	43	220	698	166	3	44	582	734	603	593
6000-6799	Finance, Insurance, and Real Estate	1,239	195	11	38	25	161	170	163	175	180	21	278	27	20	41	42	30	256	56	8	15	197	257	284	156
7000-7999 8100-8999	Services, except Medical	3,717	962	94	70	39	350	258	250	241	239	84	276	66	43	30	186	108	308	82	8	68	367	416	314	386
8000-8099	Medical Services	2,040	1,336	100	110	81	270	336	262	253	281	46	224	81	44	29	133	27	246	56	5	81	238	334	218	279
9000-9799	Public Administration	744	264	35	8	4	67	51	64	47	64	35	96	14	8	6	18	24	148	2	6	8	65	133	131	67
	Miscellaneous	1,786	2	10	0	0	10	10	10	10	10	2	6	1	2	1	4	0	6	2	0	1	6	9	8	3
	Sub-Total	34,566	5,449	1,739	531	277	4,285	4,258	4,443	4,422	4,237	575	2,444	439	423	229	530	718	2,746	585	39	343	2,310	3,022	2,775	2,119
	TOTAL	41,754			808		21,645					5,358							3,713				5,332		4,894	

[8]Most of these temporary employees work for canning companies.

[9]See footnote [7] on page 20 for an explanation of the education and training requirements.

The information provided in Table XIII has been calculated according to percentage and this information is given in Table XIV. For example, according to this table, the 870 persons employed in the Construction industry would be broken down as follows:

86.7% are full-time employees
10.7% are part-time employees
and only 2.6% are temporary employees.

TABLE XIV
PERCENT SUMMARY TABLE — SIC CODE

*SIC CODE	TITLE	EMPLOYEES			*JOBS OPEN		ANTICIPATED JOB OPENINGS					EDUCATION [10]							TRAINING [10]				Experience Required		Promotion Possible	
		Full Time	Part Time	Temp-orary	Now	One Month	1975	1976	1977	1978	1979	1	2	3	4	5	6	7	1	2	3	4	Yes	No	Yes	No
0100 - 0999	Agriculture	51	19	30	33	67	24	20	19	19	19	12	56	6	6	0	18	3	62	27	0	12	52	48	29	71
1000- 1499	Mining	96	4	0	0	0	22	44	11	0	22	29	43	14	0	0	5	10	64	14	0	21	48	52	30	70
1500 - 1899	Construction	87	11	3	79	21	36	18	16	12	18	10	57	5	6	3	1	17	63	33	1	3	55	45	44	56
2000 - 3999	Manufacturing	91	3	6	75	25	18	19	21	22	20	12	44	8	10	4	6	16	80	10	1	9	39	61	74	26
4000 - 4999	Transportation, Communication Power & Gas	83	16	2	73	27	32	20	19	15	13	6	59	7	8	4	2	14	29	20	0	11		51	52	48
5000 - 5999	Wholesale and Retail Trade	61	37	2	62	38	28	21	19	16	15	13	46	8	10	3	3	17	77	18	0	5	44	56	50	50
6000 - 6799	Finance, Insurance and Real Estate	86	13	1	60	40	19	20	19	21	21	5	61	6	4	9	9	7	76	17	2	5	43	57	65	35
7000 - 7999 / 8100 - 8999	Services except Medical	78	20	2	64	36	26	19	19	18	18	11	35	8	5	4	23	14	66	18	2	15	47	53	45	55
8000 - 8099	Medical Services	59	38	3	58	42	19	24	19	18	20	8	38	14	8	5	23	5	63	14	1	21	42	58	44	56
9000 - 9799	Public Administration	71	25	3	67	33	23	17	22	16	22	17	48	7	4	3	9	12	90	1	4	5	33	67	66	34
	Miscellaneous	99	0	1	0	0	20	20	20	20	20	13	38	6	13	6	25	0	67	22	0	11	40	60	73	27
	Sub Total	83	13	4	66	34	20	20	21	20	20	11	46	8	8	4	10	13	74	16	1	9	43	57	57	43
	TOTAL	100			100		100					100							100				100		100	

*[10] See Footnote 7 on page 20 for explanation of the education and training requirements

EXPANSION OF MANPOWER STUDY INFORMATION

In order to present an evaluation of the entire job market in the Moarine Park VTAE District, it would be necessary to expand the information obtained in the Study to include all the employees in the District. Table XV presents such an evaluation. Through the use of the Standard Industrial Classification code numbers and information obtained from the 1970 census, a comparison has been made between the number of employees by industry - according to the 1970 census - and the number of employees by industry reported in the Manpower Study. The comparison was then used to estimate the number of job openings between 1975 and 1979 for each type of industry. This was done through the use of the following proportion:

$$\frac{A}{B} = \frac{C}{D}$$

which states that the ratio of the number of employees listed on Manpower Study returns (A) to the total number of employees in the District (B) is equivalent to the ratio of the number of job openings listed on Manpower Study returns (C) to the total number of job openings to occur in the Moraine Park VTAE District (D). Therefore, as shown in Table XV, there were 21,645 job openings listed on Manpower Study returns, and these job openings can be increased to 40,524 for the entire labor force in the District. This increase nearly doubles the job openings listed on the Study returns.

TABLE XV
EXPANSION OF MANPOWER STUDY JOB OPENINGS

SIC CODE	Industry	No. Employed 1970 Census	No. Employed Manpower Survey	No. of Job Openings 1975-1979 Manpower Survey	Estimated Job Openings 1975-1979
0100 - 0999	Agriculture	8,923	73	134	—[11]
1000 - 1499	Mining	137	48	9	26
1500 - 1799	Construction	4,698	870	200	1,194
2000 - 2099	Food Processing	3,374	2,738	2,181	2,658
2100 - 3999	Manufacturing	29,390	19,203	13,383	20,889
4000 - 4799	Transportation	2,609	1,471	108	192
4800 - 4899	Communications	798	332	46	110
4900 - 4999	Utilities	1,060	252	55	211
5000 - 5199	Wholesale Trade	2,308	409	72	420
5200 - 5999	Retail Trade	13,708	3,823	1,790	6,670
6000 - 6299	Finance	902	909	596	580
6300 - 6799	Real Estate and Insurance	1,398	536	263	686
7000 - 7899	Business and Repair Services	3,699	1,144	584	1,896
7900 - 7999	Entertainment and Recreation	587	158	64	754
8000 - 8099	Medical	5,245	3,476	1,082	1,582
8200 - 8299	Educational	5,911	3,245	625	1,071
8100 - 8199 8300 - 8999	Legal, Engineering and other Professional	1,214	207	99	551
9000 - 9399	Public Administration	2,774	1,043	303	779
	Miscellaneous	2,038	1,817	51	255
	—Total—	90,773	41,754	21,645	40,524

[11] Sample is too small to make a prediction.

RAW DATA - MANPOWER STUDY RETURNS

The following two sections of this report contain a majority of the raw data that was received on Manpower Study questionnaire returns. The first section contains a listing of all the various job titles from the Manpower Study, along with the number of job openings, the education and training requirements for the position, whether or not experience is required, and if there is a possibility for promotion to a higher level position. This section has been separated from the rest of the report by its difference in color and it contains its own index. This has been done to enable the reader to easily identify and find a particular position. For example, to find information pertaining to practical nurses, the reader should look in the index where it is noted that the practical nurses are in category two on page 45. The reader can then turn to page 45 for the information on practical nurses and other similar occupations.

Following this special section of the report is a listing of various comments which were included on the Manpower Study returns. They serve to add insights into the labor situation in the Moraine Park VTAE District which one might not readily perceive from the raw data.

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OCCUPATIONAL CLUSTER INDEX

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Category No. 1	PROFESSIONAL AND MANAGERIAL							
DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
001081	Architect	2						
005081	Civil Engineer	82			6.33			
007081	Mechanical Engineer	361	2			900.00	3	1
007181	Engineering Technician, Die Designer	39			3.50			
007187	Medical Engineer	1						
012168	Quality Control Supervisor	6						
012188	Production Engineer	53						
012288	Industrial Engineering Technician	92				1048.00	5	2
013081	Agricultural Engineer	6			4.11	800.00		
014081	Marine Technician	1			5.50			
018188	Surveyor	9			3.23			
019281	Quality Control Technician	20						
020088	Systems Analyst - Engineer	1						
022081	Chemist	1	1					
029181	Lab Technician (Manufacturing)	9						
029381	Bottle House Quality Control Technician	2		2				
045108	Counselor, Psychologist	113	16	4		825.00		
078381	Laboratory Technician, Medical Technician	16	15	4	3.23		1	1

OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
										1			1				1	1	
7	5	4	8	7		2			2	2		2	3		3	4	4	4	2
10	10	10	9	10		7		5		8	1	14			2	14	7	19	
3	2	3	4	4		2		2	2	1		6			1	3	4	7	
							1					1					1	1	
								1	1	1		3				3	1	3	1
6	5	6	8	9					1	4		4				3	2	5	
11	15	15	13	9		2	1	7	1			9				4	7	11	
	1					1	2			2		2	1			3	2	4	1
1	1							1				1				1		1	
2	3	2	1	2		2	2					4					4	4	
		1	2			3						2			1	1	1	3	
									1	1		1				1	1	1	1
	1	1	1	1				1		1		1	1				2	2	
1	1	1	1	2		1	1					2				1	1	2	
6	5	4	4	4					2	27		6			4	12	16	17	5
1	2	3	1	2	1	5	7	2	2	1		9	3		2	5	13	5	9

Category No. 1 PROFESSIONAL AND MANAGERIAL

DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
110108	Lawyer	40	2					
119288	Abstractor	7			4.00			
120108	Chaplain	1	2	2		1127.00		1
142031	Display Manager (Store)	3	4		2.15			
160188	Accountant, Auditor	83	1		3.93	822.00		
161118	Treasurer	1	12		3.83	90.00		
162158	Purchasing Agent, Buyer	86	6	2	2.55	625.00	1	
163118	Sales Manager (Any industry)	10	2			767.00		
163168	Manager-Utility Sales & Service	11						
164118	Manager - Advertising	3				600.00		
166118	Manager-Personnel	115	2	2	3.83	990.00	1	1
166268	Field Representative (Social Security) Placement Officer (Education)	6			7.42			
168168	Manager-Credit, Building Inspector	4	2		3.00			
168287	Court House Examiner		1		2.00		1	
169168	Business Manager, Office Manager	278	1		5.18	613.00	2	1
169188	Insurance Underwriter	15	6			700.00	3	3
169268	Loan Clerk	2				415.00		
180118	Field Assistant (Agriculture)	24			2.00		1	

OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-job Training	Apprentice Training	No Social Training Required	Other (Specify)	Yes	No	Yes	No
3		1				2				24		1	1		2	18	7	1	22
						1			1			1					2	1	1
										4		1			2	3	1	1	2
	1				1	3		1			1	5			1	3	3	5	1
4	8	5	3	5		3	1	4	4	14		9	1		3	14	11	22	4
						4		1		1	5	6			1	4	7	[illegible]	9
6	8	5	5	4		15	2	6	9	5	7	26	4		3	34	10	23	14
						5				2		4	1		1	4	3	3	4
						3						3				3		2	
									1	2		1			1	3		1	1
4	3	5	3	1	1	8	1	5	12	39	1	34			13	49	17	52	11
				1		2		1		4		3			1	4		4	
				1		2		1	1	1		5				2	3	1	3
1						1						1					1	1	
3	8	9	9	11		17	2	4	12	8		37			1	32	14	24	20
6	7	6	6	7		3		1	1	1	1	4			1	2	5	6	1
	1			1		2						1	1			1	1	2	
2	2	3	3	4		2	1	2		1		4	1			4	2	6	

Category No. 1 PROFESSIONAL AND MANAGERIAL

DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
180168	Manager-Production	58						
183118	General Manager, Manager-Branch	96				771.00		
183168	General Foreman, Supervisor	234	2		5.61	698.00	1	1
184168	Warehouse Manager, Storekeeper	44			3.97	517.00	1	
185168	Manager	193	7		3.99	919.00	5	1
186118	Controller, Department Head	64	2		3.50	1713.00		
186168	Reserve Officer-Bank, Supervisor-Credit Union, Manager-Apartment House	92	3		2.00	825.00		
186288	Loan Officer - Bank	54			3.50	875.00	3	1
187118	Administrator - Medical Facility	210				1127.00		
187168	Manager, Funeral Director	98	2	4	3.00	941.00		
188118	Director, Public Works	5	2			400.00	1	
188168	Postmaster	25	3		7.13	984.00		
188188	Assessor		1					
189118	General Manager, President, Vice President	204	4		3.08	719.00		
189168	Management Trainee	36				1000.00	7	6
189268	Field Representative	22	1					
191268	Credit Analyst	3						
191287	Appraiser	2	2					

OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1976	1978	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
	1						2			1		2				3		3	
1	2	2		1	1	13	2	5	3	7	1	21	2		1	19	9	21	5
7	9	8	8	8	4	15		2		3	3	20			3	16	11	22	3
2	1	1			1	12	2	7	2	5	2	22	2		1	28	4	17	9
11	15	11	9	11	1	56	17	17	9	11	18	90	17		8	115	27	53	76
		2	2	2		12	3	3	6	11		21	4		4	26	8	22	9
9	7	10	8	9		12	1	5	7	7	1	28	1			25	8	18	15
3	2	3	3	4		11	2		5	4		14	2			15	6	19	
1		3	1	1		3	1		2	16		7			5	16	5	9	10
1	2	2	3		2	32	3	7	7	10	6	38	15		4	51	22	24	39
						4		1			2	4			2	6	1	1	6
		4			3	14	2	2	2	2	2	19			4	19	9	24	2
											1						1		1
1	4		2	1		11	2	2	21	19	6	27	5		7	51	9	28	28
32	32	32	32	32		1		1		2		3			1	2	2	4	
1	2	1	2	2		3	1		1	1		4				4	2	4	2
				1		2						1				1	1	2	1
						1			1				2			1	1	1	1

Category No. 1 PROFESSIONAL AND MANAGERIAL

DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
195108	Social Worker	206	23	14		821.00	5	8
195118	Administrator-Social Service Agency	23	4	1		1400.00		1
195168	Activity Director	5	6		2.18			
195228	Recreation-Craftsman	8						1
199168	Urban Renewal Planner	1						
213138	Supervisor - Computer Operations Supervisor - Stenographic Pool	18				1249.00		
235138	Communications Specialist (Telephone Co.)	7						
299138	Department Manager - Food Store	31	1		3.96	730.00		
320137	Manager - Small Lodging Facility	2	1		2.54			
429131	Agricultural Supervisor	3						
529137	Shift Superintendent	62						
950782	Maintenance Engineer	1						

OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-Job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
28	26	24	25	25	1				3	13		3			2	7	10	6	10
2		2	1	1		6				3	1	3			1	5	4	2	6
						2	2	1	1		2	1	2		1	4	4	5	3
	1				1		1					1				1	1	2	
									1			1				1			1
1	1	3	1	1		2		1	2	6		7			1	9	2	8	3
											1	1					1	1	
2	1				1	9		1		2	1	12	2			8	6	12	2
					1						2	2				3			3
										1						1		1	
	2							3				3				3	1	3	1
							1					1				1			1

Category No. 2	HEALTH							
DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
007187	Medical Engineer	1						
070108	Doctor, M.D., Psychiatrist	70	22		35.00	1625.00	15	13
072108	Dentist	18	3		15.00			
073108	Veterinarian	11				1300.00		
074181	Pharmacist	28	11		6.60	834.00	3	2
074387	Pharmacy Assistant	3			2.97			
075128	Director of Nursing	3	1			900.00		
075378	Nurse, R.N.	261	301	10	4.36	629.00	27	26
077168	Dietician	3	4		3.75			
078368	X-ray Technician	34	17		5.15		1	
078378	Dental Assistant	16	2		2.38	443.00		
078381	Laboratory Technician, Medical Technician	16	15	4	3.23		1	1
079108	Optometrist, Chiropractor	14						
079128	Occupational Therapist	46	2	3	3.79	931.00	1	
079368	Medical Assistant	57	10	1	2.84	300.00	1	
079378	Licensed Practical Nurse, Operating Room Assistant, Physical Therapist	251	162	5	3.52		21	3
100388	Medical Records Supervisor	4						
187118	Administrator-Medical Facility	210				1127.00		

OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-Job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
							1					1					1	1	
9	5	4	4	5					1	22		3			11	20	3	3	17
						1			1	13					5	14	2	2	14
										6		1			2	5	1	2	4
2	2	2	4	1	1					17	1	2	2		5	9	8	9	6
						2						2				1	1		2
										4		2				2	2	1	3
64	73	70	73	85		1		6	5	23		13	1		8	15	19	20	11
										5	1	2			2	4	2	1	3
6	6	10	8	10		4	1	12	1			6	3		5	6	12	4	12
	1					7	7	1				10	1		1	3	12	2	13
1	2	3	1	2	1	5	7	2	2	1		9	3		2	5	13	5	9
										12		1			7	11	1		12
7	8	5	5	7		3	1		2	8		9				8	6	6	1
11	4	5	2	6		13	7	3		2		9	4		1	5	17	8	13
52	56	53	56	60		4	19	10	3	4		19	3		6	13	25	13	20
1						3				1		2			1	3	1	1	2
1		3	1	1		3	1		2	16		7			5	16	5	9	10

Category No. 2 — HEALTH

DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
219388	General Office Clerk, Ward Clerk	1231	214	24	2.57	462.00	13	
249388	Medical Record Clerk	31	14	2	2.84	462.00	1	
354878	First Aid Worker	1						
355878	Nurse Aide, Orderly	562	465	38	2.46		18	3
356874	Veterinary Hospital Worker	5	6		2.25	400.00		
712381	Dental Laboratory Technician	3			5.00			
713381	Optician	11	2		1.70	400.00		

OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-Job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
141	152	171	177	159	3	114	15	4	1		19	92	6	3	1	38	112	83	55
5	2			1		9	3	2		1	2	7	5		1	7	8	5	7
								1				1						1	
81	124	81	86	91	3	14	6	1			1	13	3		3	7	18	12	11
4					2	3	1	2				7				3	5		7
							1	1	1			1	1		1	2			3
1	2	2		2		4	1	2				7				1	6	1	6

Category No. 3 — EDUCATIONAL

DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
045108	Counselor, Psychologist	113	16	4		825.00		
090118	Financial Aid Coordinator (Education)	1						
090168	Registrar	4						
091118	Principal, Administrator	107	1			1450.00		1
091228	Teacher (Elementary, Secondary, & Post Secondary)	1838	128	30		690.00	15	16
099168	Education Specialist	20					1	1
099368	Teacher Aide	85	33		2.40	360.00	1	
100118	Library Director	2						
100168	Librarian	48	5			751.00		
109687	Library Page	2						
152028	Teacher - Musical Instrument		15				5	5
166268	Field Representative (Social Security), Placement Officer (Education)	6			7.42			

OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
6	5	4	4	4					2	27		6			4	12	16	17	5
										1						1		1	
										1		1				1			1
4	3	2	3	1						31		4			7	21	7	11	11
78	62	66	65	63		2		1	1	29		4			4	6	24	21	6
			3			1		1		2		2			1	2	2	2	2
9	5	3	4	3		9		1	4			5	1		1	1	13	2	11
		1								2		1				2		1	1
2	3	2	2			1			2	23		6			4	7	17	9	11
					1												1		1
5	5	5	5	5					1						1	1			1
										4		3			1	4		4	

Category No. 4 — GRAPHIC

DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
001281	Architectural Draftsman	17		1	4.00			
005281	Architectural Designer	2	1		2.00			
007281	Draftsman, Tool Designer	237	1	1	3.26	943.00	1	
013081	Agricultural Engineer	6			4.11	800.00		
017281	Draftsman (Landscaping)	7	1		3.00			
142031	Display Manager (Store)	3	4		2.15			
142081	Designer, Package Designer	6	2		2.50			
148081	Memorial Designer		2					
298081	Display Assistant (Department Store)	1						
650582	Linotype Operator (Newspaper)	1			4.25			
650782	Photo Compositor (Newspaper)	5	1		3.88			
651381	Overlay Cutter	1			2.40			
651782	Printing Press Operator	36	2		4.11	550.00	1	1
651885	AB Dick Offset Operator		1					
652782	Printer	20			2.71	400.00		
652885	Typesetter, Stenciler	13						
653885	Collater		1		2.25			
659130	Foreman - Printing Shop	8			5.00	900.00		

OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
1	1	2					1	4				3	1			3	2	4	1
								1				1				1			1
17	21	26	24	20		4	1	14	1	1	2	10	2		2	7	13	17	3
	1					1	2			2		2	1			3	2	4	1
		1		1			1	1	1			3				2	1	2	
	1				1	3		1			1	5			1	3	3	5	1
1		1				1		1				1	1			2		1	1
					1											1			1
1								1									1	1	
											1	1				1			1
	1	1				1		1				1	1				2	1	1
											1						1	1	
	2	1	1	1	1	6	4				3	2	8		1	10	4	11	3
					1							1					1		1
1			1			2	1				1	2	1				4	2	2
		1				1					2	3					2	2	1
1					1												1	1	
1						2	1	2			2	7				5	3	5	3

Category No. 4 — GRAPHIC

DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
710884	Microscope Slide Preparer	20						
970381	Sign Lay Out Man and Painter	5	1					
971887	Printing Plate Setter	1	1		2.10			
973381	Floorman - Newspaper	6	9		3.78			
976381	Dark Room Technician	1			2.25			
976782	Film Developer	2	1					
979381	Line Up-Paste Up Man (Printing)	23	26	1	2.46	600.00		
979884	Silk Screen Press Operator	2			2.00			

OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-Job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
						1						1					1		1
		1				1		1		1	1	1				1	1	3	
						1						1					1		1
					1			1			2	1	3			2	2	1	3
	1					1						1					1	1	
						1						1				1			1
	2	2	1		1	3	2				4	4	2		1	2	9	6	5
	2				1							1					1	1	

Category No. 5 — ARTS

DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
131068	News Commentator	1				700.00		
132018	Editor (Newspaper)	4	1		2.25	1138.00		
132088	Copywriter	1				500.00		
132268	Newspaper Reporter	12	1		3.00	1200.00		
143062	Photographer	5	4		3.25	1250.00		
152028	Teacher - Musical Instrument	15					5	5
152048	Band Member (Musician)		16		5.00		1	
159148	Radio DJ, Radio Announcer	13	7	2	3.00	433.00	4	1
740887	Painter - Artist	1						
771281	Memorial Engraver	1						
957282	Radio Control Room Technician	1			3.56			
957382	Audio, Transmitter, and Master Control Operator	1				1000.00	2	1
970281	Photographer Assistant	1						

OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
								1							1			1	
						1			2	2		4				4	1	2	3
								1							1			1	
	1	1							1	1		1	1			2		2	
	1					2	2		1		3	2	5			4	4	1	7
5	5	5	5	5					1						1	1			1
	1					1					2	1			1	3		1	2
1		2				1	2	1				3	1			1	2	3	
						1						1					1	1	
													1			1			1
						1							1			1		1	
1								1				1				1		1	
							1									1			1

Category No. 6	BUSINESS AND							
DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
020188	Data Processing Programmer	19	1		3.87			
160188	Accountant, Auditor	83	1		3.93	822.00		
160288	Cost Estimator	4						
161118	Treasurer	1	12		3.83	90.00		
162158	Purchasing Agent, Buyer	86	6	2	2.55	625.00	1	
169168	Business Manager, Office Manager	278	1		5.18	613.00	2	1
201368	Secretary	661	97	6	2.91	439.00	8	12
202388	Stenographer	21	1	1				
203588	Typist	50	13		2.83	425.00		2
204288	Correspondence Secretary	8	1		2.75			
205368	Personnel Clerk	3						
206388	File Clerk, Record Clerk	69	36	1	2.46	383.00	3	
207782	Offset-Duplicating Machine Operator	9			2.60			
209388	Clerk Typist, Office Clerk	176	40	3	2.56	450.00		1
209488	Circulation Clerk (Newspaper)		9		2.53			
209688	Proofreader	1	2		3.50			
210388	Bookkeeper	384	99	5	2.64	520.00	5	
213138	Supervisor - Computer Operations, Supervisor - Stenographic Pool	18				1249.00		

OFFICE OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
1	1	1	1	2		2	1	1	2	2		6	1			5	2	7	1
4	8	5	3	5		3	1	4	4	14		9	1		3	14	11	22	4
2		1		1			1		3			3				2	1	3	
						4		1		1	5	6			1	4	7	2	9
6	8	5	5	4		15	2	6	9	5	7	26	4		3	34	10	23	14
3	8	9	9	11		17	2	4	12	8		37			1	32	14	24	20
71	74	72	69	60	3	161	32	16	4		24	122	14	3	11	86	146	88	120
4	2	5	5	7		4						2				1	3	3	1
7	7	8	9	10		12	1				1	6			2	1	12	8	3
	1					5	2					7				2	4	4	3
3	2	1				2	1					2				1	2	2	1
6	8	10	9	13		23	3	1			3	13	4		2	3	24	20	5
			1			4	1					2	1		2	2	3	2	2
27	22	24	24	25	2	40	6	4			4	32	6	1	3	18	37	33	21
	2	2			3							1					3	3	
						1											1	1	
40	33	33	25	24	2	137	32	55	21	12	37	138	21	2	27	190	101	94	162
1	1	3	1	1		2		1	2	6		7			1	9	2	8	3

Category No. 6	BUSINESS AND							
DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
213382	Computer Operator	34	5		4.25		1	
213582	Key Punch Operator	114	4	2		350.00	3	1
214488	Billing Clerk (Wholesale Trade)	21	2		2.37	450.00	1	
215388	Account Clerk	43			2.69			
215488	Payroll Clerk	101	11		3.06	638.00		
216488	Adding - Calculating Machine Operator	4	1		3.37			
217388	Proof Machine Operator (Banking)	14	1			445.00		
219388	General Office Clerk, Ward Clerk	1231	214	24	2.57	462.00	13	
219488	Cost-Accounts Payable Clerk	4						
219588	Posting Machine Operator	10	4					
230878	Messenger	1		1				
231588	Mail Clerk	1						
232368	Post Office Clerk	57	46		4.93	795.00	1	
233388	Mail Carrier	132	42	2	4.96	896.00		
234885	Folding Machine Operator	12	3		3.50			
235138	Communications Specialist (Telephone Co)	7						
235862	Telephone Operator	100	10	3	2.05			
237368	Receptionist	173	57		2.56	431.00	13	11

OFFICE OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
2	1	5		3		4	3	3	1			9	1		1	5	5	8	2
11	11	10	10	10		12	2	1				7	1		4	2	14	13	3
2	1	2	1	1		6	2					5				1	6	5	1
4	1	1		3		5	1	1				5				3	4	5	2
6	8	8	4	5		33	14	2			1	33			2	17	27	30	12
	1		1			3						1				1	2	2	
1	2		3	1		5						3	1			1	4	5	
141	152	171	177	159	3	114	15	4	1		19	92	6	3	1	38	112	83	55
1						1	1					1				1	1	2	
	1		1			3						3					3	2	1
	1			1	1						1	1					2		2
						1						1					1	1	
4	1	2	1	2	6	15					3	20			1		23	24	
2	2	3		7	8	19					3	24			1	1	27	26	3
2	3	3	3	3	1	2					2	2	2			1	4	4	1
											1	1					1	1	
	2		3			9		1			3	8	1		1	1	14	7	7
32	31	31	29	30	2	58	8	2	2	1	10	41	7	2	3	14	64	38	41

Category No. 6 BUSINESS AND

DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
249868	Vault Attendant (Banking)	2	1			325.00		

OFFICE OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
						1						1					1	1	

Category No. 7	SALES, MARKETING AND							
DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
163118	Sales Manager (Any Industry)	10	2			767.00		
163168	Manager-Utility Sales and Service	11						
164118	Manager-Advertising	3				600.00		
169188	Insurance Underwriter	15	6			700.00	3	3
169268	Loan Clerk	2				415.00		
211368	Bank Cashier	32	4		2.78	975.00	1	
211468	Cashier-Store Clerk, Ticket Seller	44	29		2.45		2	
212368	Bank Teller	155	27	1	2.05	471.00	1	
214488	Billing Clerk (Wholesale Trade)	21	2		2.37	450.00	1	
221168	Material Manager	2						
221388	Product Control Clerk	48						
222138	Shipping Clerk	110			3.46		1	1
222368	Expeditor	4				1000.00		
222387	Shipping-Receiving Clerk	32	9		2.61			
222587	Shipping Clerk	15			3.00			
222687	Milk Intake Operator	4			5.32			
223138	Shipping & Receiving Foreman	3						1
223387	Tool Room Clerk, Stock Room Clerk, Traffic Manager	127	18		3.78			

DISTRIBUTION OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
						5				2		4	1		1	4	3	3	4
						3						3				3		2	
									1	2		1			1	3		1	1
6	7	6	6	7		3		1	1	1	1	4			1	2	5	6	1
	1			1		2						1	1			1	1	2	
1	1	1		1	1	16	3		5	5	1	17	1			22	9	25	4
3	3	2	3	3	1	16					8	17	1		1	3	24	14	13
16	22	18	21	21		30	2	1				18	5			12	19	30	
2	1	2	1	1		6	2					5				1	6	5	1
						1					1	1				1	1	1	
2	1					4	2	1	1			7			1	4	4	8	
8	7	8	8	7	3	18	1	1			6	14	2	1	3	4	23	19	5
		1	1			1	2					2				2	1	3	
6	3	3		1	4	22					5	17	1		2	6	23	22	3
1	1		1			3						1					2	3	
						2					1	3					3	2	
						3						2			1	3		2	1
8	9	9	7	7	3	18	2	4			3	15	2		2	11	18	21	5

Category No. 7	SALES, MARKETING AND							
DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
223388	Inventory Control Clerk	36						
223487	Checker-Bakery Products	4	19		1.88			
231687	Shipper	2	60		2.00			
239588	Meter Reader (Power Company)	19			5.11			
240388	Bill Collector	2						
241168	Claim Adjuster (Insurance)	10						
242368	Travel Agent, Desk Clerk (Hotel)	24	17		2.00		1	
243368	Service Desk Worker (Dept. Store)	12	10					
249138	Claims Clerk	7			3.08			
249168	Copyman (Newspaper)	1						
249288	Engineer Clerk	2						
249368	Court Clerk, Library Aide	46	4		2.36	390.00		
249388	Medical Record Clerk	31	14	2	2.84	462.00	1	
249868	Vault Attendant (Banking)	2	1			325.00		
250158	Sales Manager	2						
250258	Salesman - Insurance	237	4			655.00	3	3
250358	Salesman - Real Estate	15	6			750.00		
251258	Salesperson - Securities	1						

DISTRIBUTION OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-Job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
						3	2	1				6				3	3	6	1
1					1	2					2	3					5	1	4
5		5		5		1											1	1	
3		1				4						2					4	1	2
							1					1					1	1	
3	3	3	3	3		1				2		3					3	2	1
3	1	1	1	1		7		1	1		2	9	1			4	8	6	6
2	2	2	2	2		1											1		1
1	1	1	1	1		1			1			2				1	1	2	
						1							1			1			1
						1							1				1		1
6	7	7	6	8	1	12	3		1	1	1	8	2		2	3	16	11	7
5	2			1		9	3	2		1	2	7	5		1	7	8	5	7
					1							1					1	1	
		1				1			1		1	2				1	1	2	1
4	4	6	1	4		19	2	1	3	2	2	10	9		2	11	15	16	5
5	2	2	3	1		2	2		3	1	1	4	1		2	1	8	2	7
											1	1					1		1

Category No. 7 SALES, MARKETING AND

DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
252258	Salesman - Finance	12						
253358	Salesman - Radio Time	10		1		700.00	4	1
258358	Salesman - Advertising	22	10			900.00	4	4
259358	Salesman - Water Softener	1	1	1	5.00		4	2
259458	Crating and Moving Estimator	2				500.00		
262358	Salesman - Food Products, Salesman - Grain and Feed	20	3			580.00		
263458	Salesman - Yarn Products	1						
266258	Salesperson - Drug Store	36	47		2.08	200.00		
267358	Salesperson - Petroleum Product	6			3.60			
273258	Salesman - Foundry Products	6						
274358	Salesperson - Furniture	16	5		2.50	525.00		
276358	Salesperson - Hardware	21	3	1	2.33	1000.00	1	
277358	Salesperson - Farm Supplies	51	6	1	2.67	1068.00	2	2
278358	Salesperson - Radio, TV & Appliance	11	1		3.88	532.00	2	2
280358	Salesperson - Garage and Automobile	50	9		2.95	450.00	4	1
281358	Salesman - Vending & Coin Machines	10	1		4.00			
282358	Salesperson - Hearing Aid	3	1				1	1
285358	Salesperson - Photo Studio	1	2					

DISTRIBUTION OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
	1			1		1			1			1	1				2	2	
1		1				2			1			2				1	1	3	
14	21	21	20	20		3		1	2	1		6			1	7	1	5	3
4	1	5	7			1		1				1					2	2	
	1			1		1						1				1		1	
3	4	4	4	4		4		3		1		5	1			5	3	5	3
	1								1			1					1	1	
10	12	9	3	5	2	9					1	8				2	9	4	6
		1		1		2						2					2		
6	1	2		3		1		1				2				1	2	2	
2	4	1	1			7	1	2				9				5	5	6	4
1	1	3	1	1		5	1	1			1	4	1			2	6	5	2
3	2	1	2	1		7	2	4	3		5	18	1			15	6	13	8
3	4	3	4			3	2	1			4	3	1			3	7	5	5
14	8	7	8	7	1	13	3	3			7	17	1		1	15	10	14	7
1	1				1	1						3					2		1
						1						1					1	1	
						1						1				1			1

Category No. 7 SALES, MARKETING AND

DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
286358	Salesperson - Sporting Goods		2	2	2.00			
287358	Salesperson - Hi-fi and Musical Instruments	4	2		2.00	500.00	1	
289358	Salesperson - General	326	19	1	3.50	600.00	3	1
290468	Sales Clerks - Store, Groceryman	260	353	29	2.15		3	2
290478	Sales Clerk, Wrapping Desk Clerk	19	23	3	2.24			
291858	Vendett	2			1.88			
291868	Newspaper Carrier		69				6	4
292358	Salesman - Driver	36	2		3.92	800.00		
294680	Auctioneer	10	5					
298081	Display Assistant- Department Store	1						
299138	Department Manager - Food Store	31	1		3.96	730.00		
299358	Bridal Consultant	3	3		2.42			
299368	Customer Service Worker	2						
299468	Cashier-Checker (Store)	64	100	1	2.53		3	1
299478	Distribution Worker	7						
299587	Bakery Girl	18	35		2.20			
299887	Sample Distributor (Wholesale Trade)	1						
319468	Order Clerk - Restaurant		3		1.60			

DISTRIBUTION OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
2	2	2	2	2	1				1			1	1			1	1		2
						1					3	2	1			1	3	1	3
30	40	39	38	36	1	20	4	2	4	1	3	23	3		1	20	14	22	7
54	38	31	29	31	8	53	3	3			8	52	2	1		15	60	49	28
2	3	2	3	3	1	5					1	8				1	8	6	3
											1						1		1
65	65	65	65	65	1						1	1					2	1	1
3	2	2	1	3	2	8	1	1			1	11	1			3	9	5	8
											1						1		1
1								1									1	1	
2	1				1	9		1		2	1	12	2			8	6	12	2
						2					1				1	2	1	1	1
							1	1				2				2		2	
31	18	15	13	14	4	18					4	16				2	25	9	15
											1	1					1	1	
4	2	1	1	1	2	8					2	7				1	10	6	7
											1						1	1	
2	1	2	1	2		2						2				1	1	1	

Category No. 7 SALES, MARKETING AND

DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
369687	Checkout Worker - Laundry	1			2.75			
920887	Packager, Meat Wrapper, Bagger	98	74	50	2.56		1	1
922137	Warehouse Traffic Man	1	1					
922887	Laborer - Stores, Warehouse Man	155	68	9	2.43	950.00	2	1
929887	General Laborer	4012	75	4	3.08	500.00	17	4
959381	Customer Service Representative (Power Co)	8						

DISTRIBUTION OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-Job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
						1						1					1		1
62	47	48	45	44	12	11		1			8	15		1		1	30	18	13
						1	1									2		1	1
20	19	22	19	19	15	19					15	15	1	2		3	48	26	21
785	889	1022	1057	1012	25	22	1	1			17	19	1	3	6	4	56	42	16
1						1		1	1			3				1	2	3	

Category No. 8 — PERSONAL SERVICE

DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
167168	Manager, Funeral Director	98	2	4	3.00	941.00		
242368	Travel Agent, Desk Clerk	24	17		2.00		1	
307878	Babysitter		7		1.90			
312878	Bartender	44	123		2.72	672.00	5	1
320137	Manager-Small Lodging Facility	2	1		2.54			
321138	Housekeeper	84	43	3	2.45		4	
323887	Maid	31	31	10	2.32			
324878	Doorman	1						
329878	Campground Caretaker	3			2.50			
330371	Barber	11	2		3.00	370.00		
332271	Cosmetologist	63	70	3	2.33		20	8
333271	Make-up Girl	1						
338381	Embalmer	5						
340368	Deskman - Bowling Floor	1	4		1.90	150.00		
340878	Pin Boys		5		1.90			
341368	Swimming Pool Worker			13				
341865	Ski Tow Operator			9	2.00			
352868	Open House Hostess		2					

OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
1	2	2	3		2	32	3	7	7	10	6	38	15		4	51	22	24	39
3	1	1	1	1		7		1	1		2	9	1			4	8	6	6
2						1						1					1		1
26	8	4	7	5	6	23	1	1	1		12	23	8	1	2	14	32	12	28
					1						2	2				3			3
7	11	7	6	6	7	7					4	9	3	1		5	14	7	10
4	2	2	3	2	9	3					3	8	1			3	12	5	9
											1						1		1
13	10	10			1						2					1	2	1	2
2					1	3	2				2		6		1	5	3	2	6
29	28	24	25	26		9	20				1	10	11		4	12	19	19	11
											1					1			1
									1				1			1			1
2											1	2				1		2	
2						1						2					1	2	
					1							1					1		1
9	9	9	9	9	1							1					1		1
											1						1		1

Category No. 8	PERSONAL SERVICE							
DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
354878	First Aid Worker	1						
358878	Locker Room Attendant			2				
359878	Assistant Funeral Director	1	1					
359883	Chauffeur - Funeral Car	1						
369884	Carpet Cleaner	1			3.00			
379868	Lifeguard			3				
381887	Cleaning Lady, Office Cleaner	11	23		2.30			
382884	Janitor - Custodian	346	231	22	2.69	346.00	10	4
389887	Window, Wall, or Floor Cleaner	5	7		3.00		1	
407138	Green Superintendent (Golf Club)	2						
407884	Groundskeeper (Recreation Facility)	7	4					
523885	Snow Maker - Ski Hill			4	2.00			
891138	Building & Grounds Supervisor	24			4.05	600.00		
899281	Maintenance Man - Factory or Mill	325	15		4.46	600.00	1	
899381	Maintenance Man - Building	46	29	4	3.05			
899884	Maintenance Man - Snow Plower	27	8	7	4.80		3	3
899887	Maintenance Man Helper	10						

OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
								1				1						1	
						1											1		
						1		1					2			1	1	2	
						1											1		1
						1													
					1								1			1			
2	2	3	2	2	9	5					3	6				3	11	3	12
57	39	33	32	30	70	59	4	1			38	54	8	7	1	27	143	50	109
					1	3											4		4
							1	1					1			2			
3					6							2					6		3
4	4	4	4	4	1							1					1		1
1	3	2	1	1		6	1	5				4	2			8	2	8	2
24	20	19	17	18	4	23	3	2			7	24	5			19	18	28	8
11	8	10	9	9	7	12	3	1			7	14	4	1	1	15	15	10	13
6	5	5	5	5	3		2				1	4				1	5	4	2
					1												1	1	

Category No. 9 — PUBLIC SERVICE

DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
109687	Library Page		2					
188118	Director - Public Works	5	2			400.00	1	
188168	Postmaster	25	3		7.13	984.00		
188188	Assessor		1					
199168	Urban Renewal Planner	1						
232368	Post Office Clerk	57	46		4.93	795.00	1	
233388	Mail Carrier	132	42	2	4.96	896.00		
371868	School Crossing Guard		5				1	
372868	Watchman	33	2					
373118	Fire Chief		2					
373884	Fire Fighter		56		5.00			
375118	Police Chief	2						
375168	Police Captain	1						
375268	Patrolman	20	3		5.80			
375868	Matron	3	1		3.00			
377868	Deputy Sheriff	27					2	
379368	Police Radio Operator	4	2					1
379868	Lifeguard			3				

OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
					1												1		1
						4		1			2	4			2	6	1	1	6
		4			3	14	2	2	2	2	2	19			4	19	9	24	2
											1						1		1
									1			1				1			1
4	1	2	1	2	6	15					3	20			1		23	24	
2	2	3		7	8	19					3	24			1	1	27	26	3
					1												1		1
11				1		4						1			1		3	3	1
						2						2				1	1		2
						1						1					2		2
						1	1					2				2			2
							1					1				1		1	
		1				1	1				1	2					3	2	1
						1					1	2				1	1		2
2	2	2	2	2		1											1	1	
			1			2						2					2	1	1
					1								1			1			

Category No. 10	AGRICULTURAL							
DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
017281	Draftsman (Landscaping)	7	1		3.00			
018188	Surveyor	9			3.23			
029381	Bottle House Quality Control Technician	2		2				
040081	Dairy Tester, Forester	12	3		3.46			
180118	Field Assistant (Agriculture)	24			2.00		1	
199281	Tester-Grain Products	1						
404884	Tree Trimmer	1			3.00		1	1
406168	Nurseryman	3			4.00			
406887	Groundsman, Nursery Worker	7	10		2.90			
407138	Green Superintendent (Golf Club	2						
407181	Landscape Gardner	4	2		3.00			1
407884	Groundskeeper (Recreation Facility)	7	4					
407887	Park Worker	2	6	3	2.73		1	
409181	Tree Surgeon	1			3.50			
409883	Farm Implement Operator	5		21				
409884	Tree Surgeon Helper	1		1	2.50			
412181	Poultryman	1		1	3.75			
421181	Farm Operator	7						

OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
		1		1			1	1	1			3				2	1	2	
2	3	2	1	2		2	2					4					4	4	
1	1	1	1	2		1	1					2				1	1	2	
2	1	1	1			4	3	1				5	2			2	5	3	4
2	2	3	3	4		2	1	2		1		4	1			4	2	6	
1			1				1					1					1	1	
1	2	1	1	1		1							1			1		1	
2		1		1		3						1	2			2	1	3	
	1		1			3						2				1	1	3	
							1	1					1			2			
2	2	2	2	2		2						1					2		2
3					6							2					6		3
	1				5	2					1	2					9	1	8
1	2	1	1	1			1						1			1		1	
21	21	21	21	21	2							2					2		2
1						1							1			1		1	
											1					1			
										1						1		1	

Category No. 10	AGRICULTURAL							
DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
421883	Farm Hand	2	2		2.50			
422887	Irrigation Man (Food Processing)	1		1				
424883	Large Farm Equipment Operator	2						
429131	Agricultural Supervisor	3						
521885	Feed Grinder (Feed Mill)	22	3	4	3.38		1	
522886	Piece Worker - Food Processing	175						
524782	Pan Man	16	2		4.54			
525884	Meat Boner	1					1	1
525887	Hide Handler	10						
526782	Retort Leader Operator	3		2	3.72			
529137	Shift Superintendent	62						
529138	Superintendent - Grain Elevator	2			3.75			
529381	Cheesemaker	13	1	1	3.38		1	1
529387	Quality Control Lab Technician (Food Processing)	8	2		4.05			
529782	Buttermaker	16			5.25			
529886	Cannery Worker	463	30	1207	2.93		1	5
550885	Mixing Machine Operator	2						
553782	Boiler Man (Food Preparation)	1						

OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
					1							1					1		
											1						1	1	
						1										1			1
										1						1		1	
2	2	1			1	6	1				5	8	1				13	6	6
																	1		1
						1						1					1	1	
10	10	10	10	10							1					1			1
					1												1	1	
	2	2		2		2						1	1				2	2	
	2							3				3				3	1	3	1
						2						2				2		1	1
4	2				1	5					1	4	3			6	1	3	4
							1					1				1			
	1		1			3						3					3	3	
306	275	270	271	269	15	16		1			3	17		1		3	33	28	6
						1						1					1	1	
											1						1	1	

Category No. 10 — AGRICULTURAL

DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
553885	Cooker Operator	4						
555887	Dead Animal Skinner	1					1	1
558782	Fermentation Operator (Bottling Co.)	3			4.35			
559782	Wastewater Treatment Operator	3			4.16			
559885	Feed Mill Man	6	1		3.40			
559886	Semi-Skilled Feed Mill Operator	12						
624281	Agricultural Mechanic	80	3	4	3.69		6	3
624381	Farm Equipment Installer and Repairman	3		1				
920887	Packager, Meat Wrapper, Bagger	98	74	50	2.56		1	1
922138	Cooler Foreman - Dairy	3			5.32			
955782	Wastewater Treatment Helper	5	2					
955887	Land Fill Site Operator	1						
977884	Caser Operator (Food Processing)	7		1	4.32			

OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-Job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
											2						2	2	
10	10	10	10	10							1					1			1
2						1						1				1			
					1				1			1				1	1		2
					1	1											2	1	1
2	2	2	2	2		1							1				1	1	
11	15	10	8	8	1	6	1	7				4	6			9	6	12	3
4		4		4							2	2					2	2	
62	47	48	45	44	12	11		1			8	15		1		1	30	18	13
						1						1					1	1	
	2	2				1					1	1					2	1	1
					1												1		1
						3					1	2				1	3	4	

Category No. 11	HOME ECONOMICS							
DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
077168	Dietician	3	4		3.75			
142051	Interior Decorator	2			4.50			
310868	Hostess - Restaurant	12	20		2.18			2
311878	Waiter, Waitress	147	232	21	1.79	120.00	11	8
312878	Bartender	44	123		2.72	672.00	5	1
313131	Chef	15	11	2	3.40	1025.00	1	1
315381	Cook	208	214		2.35	360.00	5	3
316884	Butcher, Meat Cutter	59	23		3.94		1	1
317884	Salad Person - Restaurant	8	1	1	2.13		1	1
317887	Cook Helper	14	23		2.35		1	1
318887	Dishwasher, Kitchen Helper	26	45	20	1.93		4	3
319138	Food Service Supervisor	83	95		2.56	604.00	4	4
319468	Order Clerk - Restaurant		3		1.60			
319878	Soda Fountain Clerk		2		1.50			
361138	Laundry Foreman	2	1		2.30			
361885	Laundryman	2	4		2.00			
361887	Laundry Worker	32	28		2.35			
362884	Dry Cleaner-Hand, Furniture Cleaner	2	1		2.50	1200.00	1	1

OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc.-Tech. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
										5	1	2			2	4	2	1	3
								2				1				2		2	
8	2	3	3	3	1	10		2			1	9	3		1	4	7	6	4
78	41	40	42	44	17	21	3			1	10	27	10	1	1	10	43	22	23
26	8	4	7	5	6	23	1	1	1		12	23	8	1	2	14	32	12	28
7			1			5	2	3	1	1	2	8	7			12	5	8	4
45	32	28	31	27	13	29	3			2	18	29	11	1	3	27	39	33	26
9	2	2	3	3	3	20	2	3			6	14	16		2	22	13	20	16
					3							1	1			1	2	1	
					2	3				1		1	1		1	2	4	4	2
23	14	14	14	16	14	3					1	9	2				20	12	6
8	21	9	12	8	6	9	5	1	2	1	2	11	6	1	1	12	11	10	11
2	1	2	1	2		2						2				1	1	1	
3	1	2	1	2							1				1		1	1	
						2					1	2	1				3		3
1					1	1						2					2	1	1
3	5	3	3	3	7	6					3	8	1	1		4	12	6	8
						2	1					3				1	1	2	1

Category No. 11 — HOME ECONOMICS

DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
363781	Silk Finisher - Laundry	1	1		2.75			
363782	Presser - Laundry	1	1		2.50			
363885	Press Machine Operator - Laundry	3	1		2.20			
365381	Shoemaker	251	1					
369138	Dry Cleaning Superintendent	2				700.00		
369687	Checkout Worker - Laundry	1			2.75			
369782	Cleaner and Presser	6	5		2.35			
369885	Drying Machine Operator (Textile Mill)	4					2	
369887	Launderette Attendant	2	16		3.00			
526781	Baker	14	3		4.17	540.00	3	1
526884	Donut Fryer		1					
526886	Baker's Helper	5	9		2.16			
559887	Cake Wrapping Machine Operator (Textiles)	1			2.20			
579387	Quality Control Technician	5						
580885	Textile Hooking Machine Operator	2						
582782	Color Dye Man	20						
582884	Laundry Cleaner and Spotter	1			5.00			
582885	Cloth Washer Operator	3					1	

OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
						2						2					2		2
						1					1	1			1		2	1	1
	1					2					1	2				1	2	1	2
20	20	20	20	20	1						1	2					1	1	
								2				1			1	1	1	1	1
						1						1					1		1
1	1	1	1	1	1	1	1				2	3				3	2	1	4
2	1	1	1	1				1				1					1		1
2		1				2		1				2			1		4	3	2
					2	4	1	1			1	7	4			6	4	5	5
						1						1				1			1
2	3	1	1	1	2	1					1	5				1	5	2	5
											1						1		
		1				1						1				1		1	
1	1	1	1	1							1	1					1	1	
					1												1	1	
							1					1				1			1
1	1	1	1	1				1				1				1		1	

Category No. 11 — HOME ECONOMICS

DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
599885	Washer, Plater, or Sterilizer	72			3.00			
680886	Can Operator (Textile Mill)	24			2.20			
681885	Yarn Winder	26			2.20			
685885	Knitting Tie-On Operator	4					2	2
689782	Hosiery Looper	20						
689885	Winding Can Handler	3			2.20			
699885	Grommeter	1						
781132	Foreman - Textile Mill	16	1		3.50			
782782	Textile Knitter	11					2	2
785281	Tailor	3	5					
785381	Seamstress	2	4		3.05			
787782	Sewing Machine Operator	118			2.61		10	10
787885	Sewing Machine Operator	191			2.20		9	
920780	Label Machine Operator	14		10	3.56			
920886	Pressman (Textiles)	6						

OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Yrs.)	College Graduate	No Preference	Formal On-the-job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
					2	3					1	4				1	5	4	2
											1						1		
											2						2		
					1							1					1	1	
						1											1	1	
											1						1		
1											1		1				1		1
1	3	1	1	1		3			1		2	5					5	4	
4	4	6	8	8		2							1			1	1	2	
	1					1	2	1			3	1	5			7		2	4
1	1					3	1					3	1			2	3	1	4
30	30	30	30	30		2					1	2				1	2	2	1
2	10	2			2	1					2	4				1	3	2	2
10	10	10	10	10	1	3					1	3				1	4	3	2
		1			1							1							

Category No. 12 — ELECTRONICS AND

DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
003081	Radio and TV Technician	12	1		5.00	800.00		
235138	Communications Specialist (Telephone Co.)	7						
235862	Telephone Operator	100	10	3	2.05			
239588	Meter Reader (Power Co.)	19			5.11			
633281	Office Machine Repairman	6			3.88	225.00	1	
637281	Appliance Serviceman	73	6		4.85	600.00	2	1
638281	Automatic Machinery Mechanic	32	3					
639281	Repairman - Coin Operated Amusement Devices	1	1		2.50			
639381	Vending Machine Repairman	1			4.30			
710381	Gas Meter Inspector	2						
715281	Watchmaker	2			3.00			
720281	TV and Radio Repairman	27	5		3.47		3	1
721281	Electric Motor Repairman	7	3		2.00			
721884	Electric Motor Rewinder	1	2		2.00		1	1
727887	Battery Caster, Paster, or Filler	7						
729281	Electric Meter Repairman	6			6.26		1	
821381	Cableman, Lineman (Power Company)	55			6.36			
822287	Line Inspector (Telephone Company)	9						

REPAIRS OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
						2	1	2				1	1		1	1	3	4	1
											1	1					1	1	
	2		3			9		1			3	8	1		1	1	14	7	7
3		1				4						2					4	1	2
2	1	1		1		2	2						3			4	1	4	1
9	14	13	14	20		11	3	3			4	12	4		1	10	11	11	8
	1		1			2	1				2	2	1		1	5	1	3	2
1		1				1	1					1	1			1	1	1	1
1						1						1					1		
						2							2			1	1	1	
			1			1		1					2			1	1	2	
7	1	1				4	4	6			2	5	3		2	10	6	10	6
1	1	2	1	1			2	2				2	2			2	2	1	3
						1						1					1	1	
											3	2					3	1	
1		1				3		1				1	3			4		2	1
5	2	2	4	2		6						1	6			2	4	4	
						1						1					1	1	

Category No. 12		ELECTRONICS AND						
DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
822381	Telephone Installer and Repairman	145	1		3.25			
823884	Antenna Repairman	1			3.50		1	
824281	Electrician	64	1	1	6.27		4	1
825281	Electrical Repairman	2	1		3.00			
829281	Pin Setter Mechanic, Electric Serviceman	21	2		2.50			
950782	Maintenance Engineer	1						
950782	Control Center Operator (Power Company)	8						
957282	Radio Control Room Technician	1			3.56			
957382	Audio, Transmitter, and Master Control Operator	1				1000.00	2	1
959381	Customer Service Representative (Power Company)	8						

REPAIRS OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
4	5	5	5	5		5					3	6	1			1	7	8	
1						1						1				1		1	
8	7	4	5	5		11	4	3			3	7	12			15	8	12	8
						2						1	1			1	1	1	1
1						4							4			3	1	3	
							1					1				1			1
1						3						3				2	1	2	1
						1							1			1		1	
1								1				1				1		1	
1						1		1	1			3				1	2	3	

Category No. 13	TRANSPORTATION AND							
DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
196228	Airplane Pilot	6	6	1				
292358	Salesman - Driver	36	2		3.92	800.00		
359883	Chauffeur - Funeral Car		1					
620281	Mechanic-Motorcycle, Air Conditioning	74		1	4.24	400.00	6	1
620381	Auto Mechanic	170	31	1	3.77	763.00	7	4
620884	Used Car Reconditioner	4	2		3.00	382.00		
621281	Aircraft Mechanic	4			3.25			
622131	Roundhouse Laborer (Railroad)	212						
622381	Carman (Railroad)	2						
624281	Agricultural Mechanic	80	3	4	3.69		6	3
624381	Farm Equipment Installer and Repairman	3		1				
625281	Diesel Mechanic	555			5.64			
625381	Power Technician	82						
630381	Can Manufacturer - Line Mechanic	26						
639884	Bicycle Mechanic		1					
807381	Auto Body Repairman	37			4.38		3	2
807884	Muffler Installer	1						
845781	Auto Painter	7			3.25			

MECHANICS OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
		1				2						1			1	2		2	
3	2	2	1	3	2	8	1	1			1	11	1			3	9	5	8
						1													
6	1	2		3		6	2	2			4	4	8			8	6	6	7
14	12	9	10	9	3	26	11	15			14	31	22		1	50	16	36	20
1					1	2						1					3	1	1
								1							1	1			1
				1		1						1				1	1	1	
											1		1				1	1	
11	15	10	8	8	1	6	1	7				4	6			9	6	12	3
4		4		4							2	2					2	2	
6	6	5	10	10	1	3		3			1	3			1	5	3	5	3
								1									1	1	
						2		1				2					2	2	
	1				1							1				1			1
5	5	4	3	2	1	7	7	2			5	10	5			13	6	6	8
1					1		1				1	1					3	1	1
1		1				2	1	1			1	2	1			3	1	2	1

Category No. 13	TRANSPORTATION AND						
DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
904883	Transport Driver	1	3					
905883	Truck Driver - Heavy	306	44	8	4.82	944.00	1	2
905887	Truck Driver Helper	1						
905883	Truck Driver - Light	89	43	4	3.47	590.00	1	1
909138	Truck Driver Supervisor	3			6.80			
909887	Laborer - Transportation	81						
910383	Locomotive Electrician	2						
910782	Section Worker (Railroad)	15		10				
910884	Brakeman, Trainman (Railroad)	389					2	2
912887	Line Boys - Air Transportation	2						
913168	City and Highway Dispatcher	3				560.00		
913463	Bus Driver, Taxi Driver	41	212	2	3.23	200.00	1	
914168	Dispatcher	6						
915137	Car Wash Supervisor	6	3	1	1.92	675.00		
915867	Service Station Attendant	19	68	3	2.10	520.00	1	
915878	Self-Serve Service Station Attendant	3	9	1	1.93			
915884	Tire Serviceman	2			3.45			
915887	Used Car Lot Attendant	6	1		2.50			

MECHANICS OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
					1								1			1			1
34	14	9	5	5	11	32		2			8	25	1	2	6	33	21	11	36
1					1												1	1	
7	3	5	1	6	8	16	1				5	15				13	17	11	17
					1	3						3			1	4	1		5
		1	1	1	1						1						2		1
						1						1					1	1	
		2				1						1					1	1	
10	2	3	4	2		1					1	1			1	1	1	1	
						1						1					1	1	
						2			1			1	1			1	2	1	2
2	1	1	1	1	3	6					5	2	2		4	2	12	2	13
1		1				3						2				1	2	1	1
2	2	1	1	1	4	3					4	4			1	1	10	1	6
23	11	14	12	12	12	5					11	13	2			[illegible]	25	11	16
3	[illegible]	2	3	3	2		1				1	1					4	1	2
						1						1					1		
		1			3	1	1					2				1	3	4	

Category No. 13 — TRANSPORTATION AND

DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
919883	Delivery Truck Driver	30	19	2	3.12		1	1
919887	Car Washer	7	15		2.00			
922883	Lift Truck Driver	80		2	3.93			

MECHANICS OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
7	4	7	4	6	5	15					6	10	1	1		4	22	10	14
11	11	11	11	11	2							1					2		2
2	4	5	7	7	1	8					2	7			2	2	9	10	1

Category No. 11 — GENERAL MANUFACTURING

DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
184168	Warehouse Manager, Storekeeper	44			3.97	517.00	1	
223387	Tool Room Clerk, Stock Room Clerk, Traffic Manager	127	18		3.78			
609684	Inspector - Manufactured Goods	106			4.79		1	
699138	Foreman - Production	6				750.00		
706884	Assembler	992	44				3	
706887	Assembler - Production	119						
732884	Stitcher-Assembler, Sports Equipment	51	8		2.40		10	
732887	Cutter - Sports Equipment	10						
741884	Spray Painter	286			3.74			
741887	Painter Helper	1						
754884	Assembler - Gluer	8					1	
754887	General Laborer - Plastics		1		2.00			
779884	Concrete Tile Maker	3		1	4.00			
789884	General Leather Worker	394	4		2.33			
806381	Assembler - Installer	46			3.53			
809131	Leader - Assembly	10						
891138	Building and Grounds Supervisor	24			4.05	600.00		
899231	Maintenance Man - Factory or Mill	325	15		4.46	600.00	1	

OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
2	1	1			1	12	2	7	2	5	2	22	2		1	28	4	17	9
8	9	9	7	7	3	18	2	4			3	15	2		2	11	18	21	5
2		2		3		5		1			3	7				3	4	6	1
		2				3						1				3		1	
160	175	191	174	174	2	4	1				5	6			2	1	11	9	2
10	20	10	10	10	1							1					1	1	
						1					1	1					2		1
											1						1		
13	11	14	13	15	3	4	1				2	4			2	2	7	8	1
											1				1		1	1	
											1				1		1		
							1								1		1		1
					1							1					1		1
60	60	60	60	60	3	1						2					4	3	1
10	10	10	10	10	1							1					1		1
	1		1			1						1				1		1	
1	3	2	1	1		6	1	5				4	2			8	2	8	2
24	20	19	17	18	4	23	3	2			7	24	5			19	18	28	8

Category No. 14 — GENERAL MANUFACTURING

DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
899381	Maintenance Man - Building	46	29	4	3.05			
899884	Maintenance Man, Snow Plower	27	8	7	4.80		3	3
899887	Maintenance Man Helper	10						
920887	Packager, Meat Wrapper, Bagger	98	74	50	2.56		1	1
921883	Crane Operator, Feed Mill Helper	17			4.75			
922137	Warehouse Traffic Man	1	1					
922883	Lift Truck Driver	80		2	3.93			
922887	Laborer - Stores, Warehouse Man	155	68	9	2.43	950.00	2	1
929138	Stockroom Supervisor	2						
929782	Palletizer Operator	19		2				
929887	General Laborer	4012	75	4	3.08	500.00	17	4

OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
11	8	10	9	9	7	12	3	1			7	14	4	1	1	15	15	10	13
6	5	5	5	5	3		2				1	4				1	5	4	2
					1												1	1	
62	47	48	45	44	12	11		1			8	15		1		1	30	18	13
	1				2	1						2				3	1	2	1
						1	1									2		1	1
2	4	5	7	7	1	8					2	7			2	2	9	10	1
20	19	22	19	19	15	19					15	15	1	2		3	48	26	21
						2										2		2	
						1		2			1	1					2	2	
785	889	1022	1057	1012	25	22	1	1			17	19	1	3	6	4	56	42	16

Category No. 15 — WOOD AND LEATHER

DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
365381	Shoemaker	251	1					
525887	Hide Handler	10						
583885	Leather Buffer	34	1		5.00			
585884	Beam House Worker	26						
585885	Leather Cutter - Trimmer	13			3.31		1	1
589387	Leather Sorter	12						
589387	Leather Inspector	56			2.73			
589885	Wringer, Folder	28			2.93			
599885	Washer, Plater, or Sterilizer	72			3.00			
640885	Automatic Cut Off Machine Operator	1						
660280	Cabinet Maker	3	1					
667782	Stock Cutter-Lumber Company	10					1	1
669380	General Wood Mill Worker	27	15		3.00			
690782	Leather Cut-Out Stitcher	100						
690885	Wood Cutter, Leather Skiver	28			2.56			
699885	Grommeter	1						
719887	Production Worker (Lumber Company)	38						
739884	Handbag Framer	11			2.56			

RELATED OCCUPATIONS (Not Construction)

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
20	20	20	20	20	1						1	2					1	1	
					1												1	1	
					2	1						1					3	2	1
					1												1	1	
2	2	2	2	2	3	2						6					6	2	4
					1							1					1	1	
4	4	5	4	4	4	2						3				1	5	5	
					3	1					1	3					5	3	2
					2	3					1	4				1	5	4	2
8	13	16	26	20							1				1		1	1	
2	2	2	2	2		1											1		1
1	1	1			1	1						2					2	2	
7		1				2					2	1					4	1	1
10	10	10	10	10	1							1					1	1	
10	3	3	2	2	2	1					1	1				1	3	2	2
1											1		1				1		1
6	6	6				1						1					1	1	
2	2	2	2	2	1												1	1	

Category No. 15	WOOD AND LEATHER							
DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
741884	Spray Painter	286			3.74			
741887	Painter Helper	1						
749884	Painter - Decorator	6					1	
760884	Wooden Box Maker	1						
761887	Sander - Wood Products	10					1	
763381	Wooden Furniture Finisher	1			3.00		1	
763884	Furniture Maker	1			4.00		1	
769687	Inspector - Wood Products	4						
780381	Furniture Repairman		1		3.00			
780884	Upholsterer	14	3		3.00			
781781	Leather Stamper	2			2.50			
781884	Leather Cutter	24			2.86			
781887	Fur and Canvas Cutter	23		2	3.50		3	
784887	Leather Strip Paster	25						
788131	Foreman - Leather Products	48			3.40	675.00		
789132	Foreman - Furniture Manufacturing	3						
789387	Leather Grader	8			3.20			
789684	Inspector	28						

RELATED OCCUPATIONS (Not Construction)

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
13	11	14	13	15	3	4	1				2	4			2	2	7	8	1
											1				1		1	1	
1						1						1					1	1	
						1											1		1
	1	1			2							1					2	2	
1							1					1				1			1
1							1					1					1		1
1						1						1					1	1	
					1							1					1	1	
4	5	6	6	6		4					1	3				1	4	3	2
					1	1						1					2	2	
1	1	1	1	1		1											1	1	
1	2				1	3					1	3	1				4	3	1
					1												1	1	
1	1	1	1	1		5		1				3	1		1	3	3	5	
						1						1					1		1
	10				1	2						1	1			1	2	2	
					1	2					1	3					4	3	

Category No. 15 — WOOD AND LEATHER

DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
789884	General Leather Worker	394	4		2.33			
929137	Skilled Yardsman	23	7		2.75			

RELATED OCCUPATIONS (Not Construction)

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
60	60	60	60	60	3	1						2					4	3	1
3	3	4	2	3	2	8						6	1			2	8	6	4

Category No. 16 — METALS AND PLASTICS

DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
500885	Production Plater	337	25				1	
502782	Metal Power	61					2	
503885	Sandblast Operator	7						
504782	Heat Treater (Foundry)	43						
512782	Furnace Operator	12			4.00			
518782	Molder (Foundry)	76			3.25		4	2
518885	Shell Core Machine Operator	65					1	
518887	Core Assembler (Foundry)	33						
519887	General Foundry Worker	238			3.60		4	
556780	Mold Setter (Plastics)	2				600.00		
600280	Machinist	1191	5	2	4.11		18	1
600381	Machine Lay-Out Man	5			4.79			
601280	Machine Tool Operator, Die Maker	1319			3.55		6	4
602782	Gear Shaper Operator	1						
604380	Turret Leather Operator	18						
604885	Screw Machine Operator	16						
605782	Mill Machine Set-Up Operator	2						
606380	Drill Press Set-Up Operator	38						

RELATED OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-Job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
10	15	20	21	20		2						2					1	2	
20	20	20	20	20							2	2				1	1	1	1
											1				1		1	1	
2	2	2	2	2	1	1						1				1	1	2	
1		1		1		3					2	4				2	3	2	3
24	20	20	20	20		1				1	1	3				1	2	1	2
20	20	20	20	20							1	1					1	1	
10	10	10	10	10		1					1	2				1	1	1	1
64	64	64	64	64	1	1					4	5					6	6	1
	1	1		1		1						1				1		1	
99	163	183	230	84	5	19	5	6			6	18	7		1	26	13	29	9
						1						1					1	1	
58	69	143	142	135	3	6	5	5		1	3	11	6		3	10	12	14	5
											1				1		1	1	
9	14	17	27	21		1					1	1			1		2	2	
1	1	1	1	1		1						1					1	1	
8	13	16	26	20							2				2		2	2	
10	15	18	28	22		2					1	1			1	1	2	3	

Category No. 16	METALS AND PLASTICS							
DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
606782	Drill Press Operator	3						
607782	Saw Machine Operator	3						
609684	Inspector - Manufactured Goods	106			4.79		1	
609782	Tape Control Machine Operator	189						
609885	Production Machine Operator	40			4.36			
615782	Shear Operator	9			3.74			
615885	Gate Shear Operator	35			4.39			
616380	Semi-Skilled Machine Operator	1549			3.10			
616380	Sp[illegible] Maker	7						
616782	Toggler	2	4		5.00			
617280	Heavy Duty Press Operator	64			4.00			
617380	Power Brake Operator	57			4.27			
617885	Punch Press Operator	391			4.62		2	
619380	Metal Fabricator	397		1	2.50	600.00	1	1
705884	Metal Finisher, Chipper or Grinder	438			4.06		5	
754887	General Laborer - Plastics		1		2.00			
809281	Sheet Metal Lay Out and Sample	4						
810782	Spot Welder	74			4.04			

RELATED OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-Job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
											1				1		1	1	
											1				1		1	1	
2		2		3		5		1			3	7				3	4	6	1
12	18	22	22	13	1	3		2			1	3				1	5	6	
						3						3					3	3	
6					2							1					2	1	
						1	1				1	2			1		3	3	
112	190	213	215	210	3	4					4	5			2	3	9	7	2
											1			1			1		1
					1							1					1		1
		1				2					2	4				1	3	3	1
8					2	1	1				1	3			1		5	4	
59	48	42	40	55	7	8		1			3	9			1	2	13	10	3
27	37	37	38	35	1	8	1				5	7	2		2	7	8	11	3
51	50	53	55	60	5	2	2				4	5	1		2	1	12	11	2
							1								1		1		1
						1		1				1			1	1	1	2	
6					2	1	1					2	1				4	3	

Category No. 16 — METALS AND PLASTICS

DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
810884.	Arc Welder	627	7		3.45		10	
811884	Gas Welder	167	10		4.53			
812884	Production Welder	10						
816884	Burning Torch Operator	4						
819381	Welder - Fitter	104	6		4.00		3	1
819887	Welder's Helper	3			4.39			
920885	Packer (Plastics)	4		2	2.75			

RELATED OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
36	18	16	18	23	3	8	3				4	6	7		1	10	8	10	6
12	13	13	13	10	1	3						3	1			1	3	4	
12											1					1		1	
											1				1		1	1	
9	4	5	3	6		5	2				2	8	2			6	5	6	5
						1						1					1	1	
3	2	2	2	2		1											1		1

Category No. 17	BUILDING TRADES							
DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
299381	Carpet Layer	8	3		3.00	920.00		
779884	Concrete Tile Maker	3		1	4.00			
801781	Journeyman Ironworker	8			7.89			
804281	Journeyman Sheet Metal Worker	39	1		4.13			
824281	Electrician	64	1	1	6.27		4	1
840781	House Painter	34	3	8	4.36	800.00	2	2
840887	House Painter Helper		3			400.00		
844781	Concrete - Stone Finisher	1	2					
850883	Backhoe, Dredge, or Scraper Operator	17			8.77			
850887	Street Department Worker	12						
851883	General Excavating Machine Operator	5			8.77			
859281	Blaster	5						
859883	Bulldozer Operator	37	4	1	5.51		2	1
859885	Crusher Operator	2			4.32			
860131	Foreman - Construction	6						
860381	Carpenter	205	22	6	4.67		4	2
860781	Billposter	2				400.00		
860887	Carpenter Helper	53	5	3	5.59			

OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
1		2		1		4					2	4	1			2	4	5	1
					1							1					1		1
						2		1				1	2			1	2	3	
2	2	2	1	1		8		3			2	6	7			8	3	6	6
8	7	4	5	5		11	4	3			3	7	12			15	8	12	8
10	4	4	3	3	1	10		1			3	8	6			9	6	7	8
3						1						1					1	1	
					1	1						2				1	1		2
5	2				2	3					1	4	1			5	1	4	2
2					1	1						2					2	2	
						1					1	2				1		1	1
						1							1			1		1	
2	4	4	2	3	3	12					2	11	3		3	10	7	3	12
					1												1		1
						1			1			1				2		1	1
14	5	5	5	8	6	29	2	3	1		7	20	20		2	30	19	22	22
						1						1							
6	4	3	3	3	2	7	1				4	5	1		1	4	11	9	5

Category No. 17	BUILDING TRADES							
DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
861381	Bricklayer	60	2	1	6.15		1	1
861781	Stone Mason	4		2	5.00			
862381	Plumber - Steamfitter	247	6	1	5.55	720.00	4	4
862884	Plumber Helper	1						
863884	Sider	13	1				2	2
865884	Glass Installer	4	1					
866381	Roofer	19	10		2.63			
866887	Roofer Helper		1		2.50			
869281	Furnace Installer and Repairman, House Mover	13			3.59			
869381	Sign Erector	1						
869883	Form Tamper Operator	2						
869887	General Laborer - Construction	87	10		3.39		2	
884884	Cement Finisher	7			6.23		1	
884887	Cement Mason	23	1	2	4.85		5	2
891884	Swimming Pool Installer		2		4.38			3
930782	Driller - Construction	4			3.50			
932883	Loader Operator	2			4.66			
939887	General Laborer - Mining & Quarrying	4	1					

OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-Job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
13	13	12	12	12	3	13		1			3	9	10			13	6	9	10
1			1			1					1	1	1			2		1	1
14	8	10	4	5	2	29	3	3			9	18	27			25	20	23	16
						1										1			1
5	5	5	4	4		2						2					2	1	1
						1					2	1	2			1	2	1	2
12	5	5	5	12	1	5					1	5	2			2	5	3	4
					1							1					1	1	
2	1	2	2	2		4		1				5	1			3	3	4	
						1						1				1			1
						1						1					1		1
20	15	16	15	15	6	4					2	5		1			11	7	4
2	2					1					4	4				3	1	1	4
4		1		1	5	4					1	3	9	1		3	9	6	6
3						1			1								2		2
						1						1					1	1	
					1												1		1
						2						1					2	2	

Category No. 18	MISCELLANEOUS							
DOT CODE	JOB TITLES	Number of Persons Presently Employed In This Classification			Beginning Salary (Optional)		No. of Positions Presently Available In This Classification	No. of Positions Open One Month Or Longer
		Full-Time	Part-Time	Temporary	$ Per Hr.	$ Per Mo.		
153228	Professional Golf Player	1						
710884	Microscope Slide Preparer	20						
715281	Watchmaker	2			3.00			
727887	Battery Caster, Paster, or Filler	7						
891884	Swimming Pool Installer		2		4.38			3
921883	Crane Operator, Feed Mill Helper	17			4.75			
922887	Laborer - Stores, Warehouse Man	155	68	9	2.43	950.00	2	1
929887	General Laborer	401	75	4	3.08	500.00	17	4

OCCUPATIONS

Anticipated Job Openings					Minimum Educational Requirement							Minimum Training Requirement				Previous Experience Required		Promotion To A Higher Level Job Possible	
1975	1976	1977	1978	1979	Less Than High School	High School Graduate	1-Year Post High School Voc. Educ.	2-Year Post High School Voc-Tech Graduate	Some College (1 - 3 Years)	College Graduate	No Preference	Formal On-the-job Training	Apprentice Training	No Special Training Required	Other (Specify)	Yes	No	Yes	No
								1					1			1			
						1						1					1		1
			1			1		1					2			1	1	2	
											3	2					3	1	
3						1			1								2		2
	1				2	1						2				3	1	2	1
20	19	22	19	19	15	19					15	15	1	2		3	48	26	21
785	889	1022	1057	1012	25	22	1	1			17	19	1	3	6	4	56	42	16

COMMENTS: MANPOWER STUDY QUESTIONNAIRES

The following comments were returned along with the Manpower questionnaire by employers from throughout the Moraine Park VTAE District. These comments contain many of the sentiments expressed by a number of employers. They also include suggestions on courses and programs which may be offered by Moraine Park.

1. Construction Company - Bluepring Reading and Math is needed to advance to a foreman and is just generally very helpful.

2. Construction Company - All positions are filled through union locals and apprenticeships.

3. Construction Company - If I may make an observation about the labor market, I would have to say that discipline is the greatest problem. I think you will see a high increase in industrial accidents because employees have very little self-discipline and will not accept impaired (imposed) discipline in the form of safety rules.

4. Advertiser - We are an advertising space sales company and need 10-20 salespeople a year.

5. Transportation - Aircraft mechanics holding both aircraft and power plant (A and P) ratings issued by the Federal Aviation Agency get good training in the Air Force, Army, or Navy technical schools. but usually need training in an "approved" school specializing in this particular field if they intend to pass the required written and practical examinations.

6. Telephone Company - A course in basic telephone installation and repair is very badly needed in Wisconsin. There are 117 telephone companies in this state, and there is no place to get technical and electrical training needed to work for a telephone company. In most cases, the telephone companies would be willing to pay for this training.

7. Wholesale Trade - All employees of this company have been notified by our president that if courses are offered by the technical institute and the employee is interested, the company will pay for the course taken.

8. Hardware Store - This is a small business and many duties overlap. A course in Hardware Merchandising would be helpful for our clerks, and a course in Air Conditioning for our men.

9. Auto Dealers and Garages - A Sales and Manpower Management course would be very helpful to our sales manager.

Comments (continued)

10. Garage - As we all know, frame straightening and wheel alignment is not "white collar" work, but in the near future we will run out of the good old timers if we don't get some young blood interested in this line of work. I think we need some good plain training in this line of automotive repair.

11. Gas Station - It is necessary to be able to read comprehensively and write, even for a mechanic.

12. Auto Dealer and Garage - Please train people to excel in horse-sense, honesty, communication, accuracy, following directions, enthusiasm, customer relations, follow-through with promises, and stick-to-it-tiveness in their work. These values are worth 100 times more than the high level of education the students think is the key to success and high pay. Today our graduates are often so disillusioned with the way things really are that they withdraw, slow down, and drop out. Good, solid vocational schooling can turn this in the right direction.

13. Radio and TV Store - To save a lot of time--what we need (and most TV and appliance stores need) are service people--someone that can handle TV and appliance repair and service of all kinds without the help of someone else when they go on the job, as we cannot afford to retrain a man at the customer's expense.

14. Bank - Of all the jobs in this bank, proof machine operator is our hardest position to fill. In talking to other banks, the same conditions prevail.

15. Insurance Company - I believe the vocational schools could provide a tremendous opportunity for development of insurance people and financial advisers. First of all, there must be instructors that are not hung up on CPCU and CLU courses. We need instructors who can teach the elementary courses of selling, advising, and counseling people in the basic insurance coverage and basic investment portfolios. It appears that there has been a big vacuum in insurance and finance from the vocational schools. There should be apprentice programs with employers and possible connections with insurance companies' apprentice programs. There does not seem to be any training in the high school, college, or vocational schools, that turn out people that know how to work in the insurance industry. There are a tremendous number of insurance companies domiciled in Wisconsin and yet no basic research has been done as to how these people got into the industry, and who trained them, and what the future development should be. I believe that this is the type of research that should be done.

Comments (continued)

16. Medical Facilities - We would like to train three of our present staff to be food service supervisors.

17. Medical Facilities - Our food service supervisor does not have a course and he would like one.

18. Medical Facility - We like to see our nurse aides have certificates before they begin work. However, we do train on-the-job in case of necessity.

19. Legal and Accounting Services - We have found that potential employees usually lack the ability to express oneself creatively, both verbally and pictorially.

20. Legal Services - Legal secretaries should have additional training beyond high school.

21. Foundry - New hourly employees are usually hired as general laborers and progress to higher classifications through the job bid procedure.

22. Newspaper - We anticipate no openings. There may be some layoffs instead, due to advanced type machines.

These comments, along with many others, were included with the questionnaire returns. They have been chosen to be included in this report since they sum up the many responses that have been received. Also, they added some insight into areas that the raw data from the questionnaires were unable to convey.

RECOMMENDATIONS

AND

CONCLUSIONS

RECOMMENDATIONS

From the 1,180 Manpower questionnaires that were returned, 544 different occupations were identified. The qualifications for employment, and the anticipated number of job openings for the next five years were included for these occupations. From this information, along with many letters and notes attached to the questionnaire returns, the feelings of many area employers have been expressed. These feelings have been grouped into braod areas of concern which, in turn, were summarized by the following recommendations.

Recommendation No. 1: Suggested Instruction

In reviewing the information gathered during this Study, a desire for certain courses or programs has emerged. Therefore, a need may exist for initiating or expanding course offerings in one or more of the following areas:

1. Telephone Installation and Repair - There are approximately 117 telephone companies operating in Wisconsin. From comments made on Manpower Study returns, it seems that they are experiencing difficulty in finding trained employees. The occupation that is the major concern of these telephone companies is telephone installer and repairman. Very limited training is available for this occupation at any school in the state of Wisconsin. It is, therefore, suggested that a follow-up study be conducted to determine the extent of this need and the possibility of offering training for telephone installers and repairmen.

2. Sewing Machine Operator - There were 309 persons employed as sewing machine operators according to Manpower Study returns. During the next five years, there will be additional job openings for 164 sewing machine operators. Also, at the time that the Manpower Study was being conducted, 19 job openings were available for this occupation, of which ten had been available for one month or longer.

   These facts show that there is a need in this part of the state for qualified sewing machine operators. Courses should be offered to train persons to be sewing machine operators in order to fill these expected job openings.

3. Mechanics - It is the sentiment of many employers that good mechanics are hard to find. Perhaps through increased vocational training, this shortage of qualified mechanics will decrease in the future.

   According to Manpower Study returns, nearly 1,500 persons were employed as mechanics. They include motorcycle and bicycle mechanics, auto mechanics, aircraft mechanics, railroad mechanics, diesel mechanics, appliance mechanics or repairmen, machinery mechanics, and so forth. Numerous job openings will be available for people in this field during the next five years.

Recommendations (continued)

It is recommended that the category Electronics & Repairs occupations, and the category Transportation and Mechanics occupations, both found in the blue section of this report, be reviewed to determine areas where proper training may alleviate the need for good mechanics.

4. Food Service Supervisor - Finally, it is recommended that the Food Service program at MPTI be expanded. Also, some effort should be expended to inform area employers of the training that is available in this field at the Moraine Park Technical Institute.

Many comments were made on Manpower Study returns that Food Service Supervisors, presently working throughout this District, would like to take courses in this field. Such a program should be available for them at Moraine Park, as many job openings will be available for Food Service Supervisors in the future. Many of these job openings will occur in nursing homes, hospitals, schools, and other institutions where food service workers provide an important service.

Recommendation No. 2: Coordinating Unit

In the course of conducting the Manpower Study, the need for a coordinating unit for manpower information became apparent. Manpower information is needed by a large variety of people--job counselors, program planners, employers, and vocational counselors. Each has their own special type of manpower information that will assist them in the performance of their job. However, in many cases the exact information they desire is unavailable, or if it is available, it is outdated.

Therefore, it is highly recommended that some type of coordinating unit for manpower information be developed. If all efforts to obtain this type of information were centralized, persons needing the information would know where to get it, and employers, who would only have to supply information to one source, would be more willing to do so with greater accuracy and fewer complaints.

Recommendation No. 3: Finance, Insurance, and Real Estate

There are approximately 438 businesses in the fields of finance, insurance, and real estate in the Moraine Park VTAE District. A large number of these businesses responded to the Manpower Study. In many of the responses, there was some concern over the lack of training for employees in these fields from the high schools, colleges, and vocational-technical schools in Wisconsin.

Finance, insurance, and real estate are growing fields and they employ a large number of people. It is, therefore, recommended that additional research be conducted to determine how people that are presently working in these fields received their original training.

Various occupations within these fields might benefit from vocational-technical education. Programs may be initiated at Moraine Park for such occupations as insurance underwriters, credit union supervisors, loan officers, credit analysts, bookkeepers, bank tellers, salesmen, and various other occupations that would lead to a career in finance, insurance, or real estate.

Recommendation No. 4: Special Section of This Report

As can be noted by examining this report, there is a section that has been printed on blue paper. This section has been separated from the rest of the report, as it contains the actual raw data from the Manpower questionnaires. All 544 occupations that have been reported on the questionnaires were separated into one of eighteen categories and are presented in this section of the report for easy reference.

It is recommended that the reader become familiar with this section of the report, in order that the information presented there may be used to support any proposals, suggestions, or any other expressions of the reader's point of view.

Recommendation No. 5: Personal Development

Perhaps the most common response received along with a Manpower questionnaire return, was that employees today are lacking in personal development. By this, some employers mean that their employees are lacking in the ability to express themselves verbally or in writing, that they have not developed self-discipline, or that they lack poise and confidence in dealing with people. Other employers state that their employees do not read well, that they may not be honest, or that they give up too quickly.

They are all quick to add, with a ray of hope, that they are confident good vocational training can turn this around. They feel that a vocational education will lead students to personal development and to a change in attitudes.

With this in mind, it is suggested that more emphasis be placed on these personal aspects in all courses offered by the Moraine Park Technical Institute. If what the employers are saying is true, we may be of additional help to our students by encouraging this personal development, along with teaching them vocational and technical skills.

Conclusion

In conclusion, this report should be looked upon as a beginning, not as the end. Much time and effort has been spent on this project to initiate new ideas and to present manpower information in a different, and perhaps more useful way. It is assumed that further research will be conducted to update and improve the information presented in this report. Only through this extended research can a reliable system of collecting and updating manpower information be accomplished.

SUMMARY

In August, 1974, approximately 4,000 mailing labels had been received from the Wisconsin Department of Industry, Labor, and Human Relations - Bureau of Research & Statistics. These labels, which contained addresses for all companies, businesses, and institutions in Dodge, Fond du Lac, Green Lake, and Washington Counties, and the New Holstein school district, were the beginning of the Moraine Park Technical Institute's Manpower Study.

Due to the ever-changing and growing society in which we live, the first step in conducting the Manpower Study was to update this mailing list. New businesses in the District were added to the list, while companies that have moved or gone out of business were deleted from the list.

Having updated the mailing list, the next step was to review similar manpower studies and to develop a survey instrument to be used in this study.

A trial questionnaire was developed and it was mailed to a sample of approximately fifty employers, asking them to critically review the questionnaire and to comment on their ability to complete the form. The response to this trial questionnaire was very favorable. Some of the suggestions offered by these employers were incorporated into the trial questionnaire and a final Manpower questionnaire was developed.

This Manpower questionnaire was very flexible and, therefore, it could be used by any type of company, business, or institution. It was sent to 3,811 places of business in the Moraine Park VTAE District in four separate mailings between October 18, 1974, and December 13, 1974.

Questionnaire returns totaled 1,180, which represents a 31% return. The majority of large businesses, those with 50 or more employees, have returned the Manpower questionnaire. Many of the non—respondents to the questionnaire included small businesses such as taverns, restaurants, gas stations, retail stores, and offices of doctors and dentists.

All occupations that were listed on the questionnaire returns were reviewed and coded according to Dictionary of Occupational Titles classifications.

All of the information contained on the questionnaire returns was keypunched and programmed by computer, so that all similar jobs have been grouped for easy analysis. This analysis included summarizations of the Manpower information by Dictionary of Occupational Titles classifications and by Standard Industrial Classification numbers.

A special section also has been provided in the final report for quick reference. This section contains all of the occupations listed on the Manpower questionnaire returns, along with the number of job openings, the educational and training requirements for each occupation, whether or not experience is required for a particular occupation, and if there is a possibility for promotion to a higher level position.

Recommendations were developed in order to highlight the main concerns of this Study. They also serve to express the feelings of many of the employers who have responded to the Manpower Study.

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APPENDIX

APPENDIX A-1

Moraine Park Technical Institute

District Office 235 North National Avenue, Fond du Lac, Wisconsin 54935 (414) 922 8611

September 16, 1974

Dear Sir:

The Moraine Park Vocational, Technical and Adult Education District and CESA 13, in cooperation with the Wisconsin State Employment Service, is presently preparing to conduct a Comprehensive Manpower Study of the District. The purpose of this Study is to obtain accurate data which will provide the District with adequate information on which to base their decisions in the long-range planning of course and program offerings. This data will eliminate the guesswork in providing needed services to meet our mission to the students, as well as to business and industry.

In conducting this Study, I would very much enjoy the opportunity to personally visit with each employer in our District. However, as there are over 4,000 employers, this would be an impossible task for me to undertake at the present time. Therefore, I will rely on a questionnaire to supply the information we will need.

You have been chosen, as one of a sample of 50, to react to the questionnaire before the final copy is prepared. Enclosed is a copy of the questionnaire that I intend to use in conducting the Manpower Study. I would appreciate it very much if you would take a few minutes from your busy schedule to critically review this questionnaire, and to comment on how it can be simplified and improved. Your comments and suggestions are requested to insure that this questionnaire will not require a large amount of your time to complete, and that it affords enough freedom for you, the employer, to tell us what type of employees work for your company, and which job positions in your company are the most difficult to fill.

Also, we are very interested in knowing your future employment needs so we can begin to prepare students to meet your future demands for trained employees.

All information which you supply, either in your present comments, or in the future, by completing a questionnaire, is strictly confidential. It will not be released in any manner or form that will identify individual companies.

A reply before September 30, 1974 is appreciated. A self-addressed return envelope is enclosed for the prompt return of your comments. If you have any questions, please feel free to contact me at 922-8611, Extension 218. Mr. Arthur Marson will be contacting you when the final questionnaire is ready for distribution.

Thank you very much for your cooperation.

Sincerely,

A. E. Weiner

A. E. Weiner, Administrator
Research and Development

Enclosure

Moraine Park Vocational, Technical and Adult Education District
Robert P. Sorensen, Ph. D.
District Director

APPENDIX A-2

Moraine Park Technical Institute

District Office 235 North National Avenue, Fond du Lac, Wisconsin 54935 (414) 922-8611

December 17, 1974

Dear Sir:

In cooperation with the Wisconsin Job Service (formerly the Wisconsin State Employment Service) and with the Cooperative Education Service Agency 13, the Moraine Park Vocational, Technical and Adult Education District is presently conducting a Comprehensive Manpower Study. The purpose of this study is to obtain accurate data which will provide the District with adequate information on which to base their decisions in the long range planning of course and program offerings. This data will eliminate the guesswork in providing needed services to meet our mission to our students, as well as to business and industry.

As an employer in our increasingly technical society, you are well aware of the need for properly trained personnel and the loss in profit to both you and to society caused by persons unprepared to perform on the job. A basic means in the development of workers to meet your present and future needs is through proper training both in school and on the job.

Your assistance in helping us to evaluate the employment conditions in our District is requested in order to insure that we are wisely using our tax dollars. I realize that you maintain a busy schedule and that due to inconsistencies in our present economy, it is difficult to estimate or predict future employment needs. Nevertheless, this type of information is necessary if we are to improve our ability to inform people of, and train them for your future job openings.

I would have very much enjoyed the opportunity to meet with you personally to discuss your employment needs. However, as there are over 4,000 businesses in our District to be contacted, and due to a limited amount of time in which to make these contacts, a questionnaire is the most appropriate means of collecting this valuable information.

Would you please take the required time from your busy schedule to complete the enclosed questionnaire. Through this questionnaire you have the opportunity to tell us the type of employees that are presently working in your company, what type of employees you are seeking, and which job positions are the most difficult for you to fill. Also, we would like you to tell us your future employment needs so we can begin to train students to meet your prospective requirements for trained employees.

A final benefit of this questionnaire is that it will provide an accurate list of the various types of companies, businesses, and institutions in our District. This list will enable us to inform you and your employees of new course and program offerings and the services that we are able to render to your company.

We are aware that surveys to evaluate manpower needs have been conducted in the state. These surveys have been very helpful; however, they do not supply all of the information that is required. Every effort is being put forth to insure that we are not duplicating these previous studies. Also, when we have completed our project we will make the information we have gathered available to other agencies throughout the state to insure that these agencies will not duplicate our efforts in the future.

The information which you supply in the questionnaire is strictly confidential and will be released in such a manner that information relating to individual companies cannot be identified.

A reply before January 10, 1975 is appreciated. If problems arise or further information is desired, please contact me at 922-8611, extension 256. Thank you very much for your cooperation.

Sincerely,

Art Marson

Art Marson, Research Specialist

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Moraine Park Vocational, Technical and Adult Education District
Robert P. Sorensen, Ph. D.
District Director

APPENDIX B
DIRECTIONS

The following directions have been developed to Save You Time in completing the "Manpower Survey" questionnaire.

The questionnaire contains a label with your company name and address along with a code number. This code number, which has four digits, is your Standard Industrial Code and it explains the type of business in which you are engaged. The code number along with your zip code will insure that the information you supply in the questionnaire will be properly recorded, according to your type of business and its location.

1) In the space provided, identify your name and telephone number.

2) List the total number of people employed by your company, business, or institution

3) **Column A** - Record the job titles of all full-time, part-time, and temporary employees of your company, business, or institution. General titles are acceptable. Some job titles have been provided as an example; if they do not apply to your company, please disregard them. Add all additional job titles to those already listed which apply to your company, business, or institution.

4) **Column B** - List the total number employed in all positions for each job title listed in Column A according to whether they are employed:

   Full-time - work extending for 30 days or more and for 30 or more hours per week.

   Part-time - work extending for 30 days or more for less than 30 hours per week.

   Temporary - work for less than 30 days or work for the summer vacation period regardless of the number of hours worked.

5) **Column C** - This column is optional. The information you provide will be grouped with similar information and an average salary for each occupation will be determined. This information will be released in such a manner that individual companies cannot be identified It will be used by our counselors to inform students of their potential earnings upon the completion of their program at MPTI.

   Indicate the initial or beginning salary for persons employed under each job title according to the hourly wage rate or the monthly wage rate, whichever is appropriate. Include fringe benefits and incentive pay; however, exclude any overtime pay.

6) **Column D** - List the total number of job positions presently available (as of the payroll period ending nearest October 15, 1974) for each job title presented in Column A.

7) **Column E** - Record the number of positions available from Column D which have been open one month or longer.

8) **Column F** - Record the total number of expected or projected job openings for the years 1975 - 1979. Include new jobs due to anticipated expansion and openings which are likely to result from normal turnover. In estimating the new jobs in an occupation, consider: 1) the general level of business activity since 1970; 2) past expansion, and 3) equipment, product, or service changes. In estimating the openings which will occur because of normal turnover, consider past experience with losses in the occupation due to transfer, promotion, demotion, persons quitting or being discharged, retirements, and death. Do not include those openings which may be filled from within your firm by promotion or transfer, or by those currently employed and in training. Include only those openings which will require hiring additional workers.

9) **Column G** - Indicate what you feel to be the minimum educational requirement for each occupation by placing a check (x) in the appropriate column. Comments relating to this requirement can be made on the reverse side of the questionnaire.

10) **Column H** - Place a check (x) in the appropriate column indicating what you feel to be the minimum training requirement for each occupation. Further explanation of this requirement can be made on the reverse side of the questionnaire.

11) **Column I** - Indicate if there is a need for work experience in this field prior to initial employment.

12) **Column J** - Please note if employees in this occupation are normally promoted to higher level jobs.

13) Additional comments and suggestions may be made on the reverse side of the questionnaire. If problems occur during the course of completing the questionnaire, please contact Art Marson at 922-8611, extension 256.

A self-addressed return envelope has been enclosed for the prompt return of the questionnaire.

Thank You.

UNIVERSITY OF CALIF.
LOS ANGELES

JUN 11 1976

CLEARINGHOUSE FOR
JUNIOR COLLEGES

Note: Appendices C-1 and C-2 (survey instruments) have been deleted from the document due to oversize format. The substance of the questionnaire is reproduced in the body of the document.